**KEYNOTE LECTURE ABSTRACTS**

**KNL01**
Genetic diagnostics from maternal blood – introduction into practice  
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Abstract not available at the time of printing.

**KNL02**
Fetal monitoring in labour  
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Simple Clinician’s Guide to Interpretation of CTG; Accelerations (represents activity of the somatic nervous system) and normal baseline variability (represents the autonomic nervous system) are hallmarks of fetal health. Two accelerations 15 beats by 15 secs in a 15 minutes window declares the baby to be non hypoxic. CTG traces of neurologically well babies will have periods of active and quiet epochs called cycling. Presence of sporadic accelerations may suggest that the fetus is not hypoxic but cycling should be present to declare neurological normal behavioural state. Accelerations with reduced baseline variability is probably of little concern. Periods of decreased variability may represent fetal sleep. Hypoxic fetuses may have a normal baseline rate between 110-160 bpm with no accelerations and baseline variability <5 bpm for > 40 mins. With baseline variability < 5 bpm even shallow decelerations <15 bpm are ominous in a non-reactive CTG. Placental abruption, cord prolapse and scar rupture can give rise to acute hypoxia and should be identified and dealt with clinically. Hypoxia and acidosis may develop faster with an abnormal trace in patients with scanty thick meconium, intrauterine growth restriction, intrauterine infection with pyrexia, and those who are pre or post term. In preterm (especially less than 34 weeks of gestation), hypoxia and acidosis can predispose to hyaline membrane disease, respiratory distress syndrome and may contribute to intraventricular haemorrhage and its sequelae- warranting early action in the presence of an abnormal trace. Injudicious use of oxytocin, epidural anaesthesia and difficult deliveries can worsen hypoxia. During labour, if decelerations are absent, asphyxia is unlikely but cannot be excluded. Abnormal patterns may represent effects of drugs, fetal anomaly, infection, cerebral haemorrhage and not only hypoxia.

**KNL03**
Maternal mortality - India and Millenium Development Goal #5  
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India contributes about 20% of births worldwide. India has the highest proportion of children younger than 5 years. The Millennium Development Goals (MDG) of the United Nations has set the target of achieving 200 maternal deaths per lakh of live births by 2007 and 109 per lakh of live births by 2015. India, as paradox, emerging as financial power, largest computer literacy, largest number of Obstetricians & Gynaecologists but with high Maternal Mortality Rate which is unacceptable. Hence, global progress toward MDG 4 and 5 depends significantly on improvements in maternal and child health indicators in India. The Maternal Mortality Ratio of India has declined from 254 in 2004-2006 to 212 in 2007-2009. The decline has been most significant in Empowered Action Group(EAG) States. It is worth noting that the number of States that have realized MDG target in 2007-2009 has gone up to 3 i.e. Kerala, Tamil Nadu and Maharashtra. Andhra Pradesh, West Bengal, Gujarat and Haryana are in closer proximity to the MDG target. Decline in Maternal Mortality Rate in India may be due to implementation of policies like National Rural Health Mission, MDG-5, FOGSI FIGO LOGIC Initiative in Maternal and New-born Health, Essential and Emergency Obstetric Care and training with partnership with FOGSI including C. Section, Janani Suraksha Yojana, Safe Abortion Services, monthly VHND, management of RTIs & STIs at PHCs & CHCs/FRUs etc. which have resulted into strengthening of infrastructure- IPHS, improving availability of Human Resource , utilization of Untied funds at sub centres, at least 50% of PHCs are operationalised as 24 hour functioning health facilities for
deliveries and basic obst & child health care, all CHCs are operationalised as FRUs for Em OC and Em child health services. Other strategies include decentralized planning, focus on rural and underprivileged sections, overcoming manpower shortage: Skilled Based Training, establishing Quality Assurance Cell at National, State and District level, reorienting medical officers, strengthening U-G education and pre-service & in-service training for SNs/LHVs/ANMs. At present we are in shortage of about 2000 obstetricians and anesthetists each and need to train about 90,000 more ANMs/NSs as SBA with availability of adequate Blood Bank facilities and transportation to achieve the target. Maternal Death is not merely a health issue, but a social injustice. Need of the hour is Political will & Professional skill. Hence, we all must realize the gravity of the situation, convince the Policy Makers, coordinate the professionals and save our women to achieve MDG 4 and 5.

KNL04
Estrogens – back to nature? Estetrol
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During the last 40 years, the development of combined oral contraceptives (COC) was tailored to the progestogen component of the pill. From the first to the so-called fourth generation COC, more than 12 different progestogens were developed. The estrogenic part of the combination remained identical over decades, preserving the ethinylestradiol (EE) due to its high efficacy and the lack of alternative molecule. Nowadays major safety concerns hamper the use of some combinations. It is well recognized that the major culprit is not the progestogen of these pills, but the EE that is no longer antagonized by the new, non-androgenic progestogens in these combinations. In order to improve safety, new estrogens are introduced in the pill. The natural reflex is to come back to basics and physiology of steroids. While the most evident molecule is estradiol, one outsider, a fetal estrogen only synthesized during human pregnancy, shows brilliant potentials. This molecule is estetrol (E4). Estetrol was discovered by Diczfalusy and co-workers in 1965. Subsequent investigations determined that E4 is synthesized exclusively by the human fetal liver and reaches the maternal circulation through the placenta. It was detected in maternal urine as early as 9 weeks of pregnancy and found at high levels in maternal plasma during the second trimester of pregnancy, with steadily rising levels to 1.2 ng/ml (4 nmol/l) toward the delivery. The fetal E4 levels are much higher, reaching at term 14 ng/ml (45.5 nmol/l) in umbilical cord plasma. E4 is an end product in humans yielding only inactive metabolites eliminated in urine. Up to now the physiological role of estetrol is still unknown, but it is obvious that nature chose harmless for infants and mothers. Experimentally in animals, E4 is efficient in ovulation inhibition. In humans, E4 showed a very efficient ovulation blockade, excellent tolerance and safety profile in two phase II clinical trials collecting data of more than 1600 cycles. This steroid has distinct estrogenic effects depending on the tissue investigated. Estetrol binds to the estrogen receptor (ER) ? and ? with a higher affinity for ER?. It has an estrogenic effect on the vagina, the uterus, the bone and the brain but was shown to display an anti-estrogenic action on the breast in the presence of estradiol. It prevents the onset of mammary cancers and causes the disappearance of previously formed tumors in animal models treated with estetrol when estradiol is present. Finally phase 2 clinical trial shows that estetrol minimally affects the liver and induces only a minimal stimulatory effect on plasma levels of SHBG, CBG, angiotensinogen, and haemostasis markers. This unique profile provides insights for breast cancer lowering or prevention in women using a combined oral contraception.
KNL05
Increasing Caesarean section rate - an analysis
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Action plan to decrease the high Caesarean rates in Turkey by the Turkish Society of Obstetrics and Gynaecology.

Short-term objectives:
- The main objective is not to have a lower number of Caesarean sections - but to manage the labor and birth better.
- The Caesarean section rates at all hospitals are aimed to be decreased to 35% in 2 years.

Long-term objectives:
The long-term objectives of Caesarean section rates will be determined by scientific studies.

Strategies:
- Strategies at the level of clinical service
- Administrative regulations
- Public-oriented strategies

The plan will be discussed entirely.

KNL06
Retroperitoneal cannulation lymphatic chemotherapy in gynaecological cancer
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Abstract not available at the time of printing.

KNL07
Genetics of female reproduction
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Abstract not available at the time of printing.

KNL08
Vulvodynia: new insights
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A classification, to be clinically useful, should be based on pathophysiological knowledge regarding the disease considered, and should imply a terminology widely accepted. On the basis of these concepts in 2003 the International Society for the Study of Vulvovaginal Disease (ISSVD) published the terminology and classification of vulvodynia (1), recommending the use of this term to describe a burning pain occurring in the absence of relevant visible findings or a specific, clinically identifiable, neurologic disorder of the vulva. Moreover the ISSVD recommended to substitute the term vestibulitis with vestibulodynia, as the suffix -itis implies the presence of inflammation which has not so far been documented. This condition is characterized by painful burning sensation, spontaneous and/or provoked (mechanical allodynia with superficial dyspareunia). The pathogenesis of vestibulodynia, the most frequent form of vulvodynia, is still unclear; the “inflammatory pathogenetic hypothesis”, based on increased mast cells number and activation, is supported by some studies (2, 3) and at the same time is contradicted by others (4, 5). The “hyperinnervation hypothesis” supported by some Authors (2, 6) and correlated also to increased number of mast cells, has lead to consider vestibulodynia as a neuropathic pain syndrome. However, recent algological findings and guidelines stated that in neuropathic pain syndrome hyperalgesia and allodynia are correlated with decreased epithelial innervation (7). Moreover, when dealing with vulvodynia, the substantial progress made over the last years by neuroscientists studying pain should be taken in mind. Actually a recent classification divides
pain into three main classes (8): a) nociceptive pain (adaptive, high-threshold and protective pain), representing the sensation associated with the detection of a potential tissue-damage; b) inflammatory pain (adaptive, low-threshold and protective pain), associated with tissue damage and infiltration of immune cells which promote repair; c) pathological pain (maladaptive and low-threshold pain), a disease state caused by damage to the somatosensory system (neuropathic) or by its abnormal function (dysfunctional). Integrating the controversial data regarding increased number of mast cells and innervation of the vestibule with the above mentioned algological insights, vestibulodynia should be regarded as a “dysfunctional pain” instead of a “neuropathic pain” or an “inflammatory pain”. Under this light vulvodynia could be considered as a possible somatization disorder which can benefit by a psychosomatic assessment and neuropsychiatric drugs use.

References:
transferred at the same occasion. Single embryo transfer (SET) has since more than 10 years been demonstrated to be the only effective way to avoid multiple pregnancies. Several studies have shown that SET gives satisfactory pregnancy- and delivery rates, although lower than double embryo transfer (DET) when analyzed in randomized controlled trials. SET accompanied with a frozen/thawed SET has however demonstrated similar delivery rates as after DET. In Sweden SET has been practiced since almost 10 years and today accounts for 75-80% of all transfers, both fresh and frozen. The delivery rate has remained unchanged, about 27% for fresh cycles while the MBR has decreased from 25% to 5-6%. Similar development has taken place in other Scandinavian and north European countries, although to a lesser extent. Large children follow up studies from Sweden demonstrate a dramatically improved outcome for the children after IVF, concerning prematurity, low birth weight and severe morbidity.

**KNL12**

**Towards safer abortion**  
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Without access to safe abortion services, women risk their health and their lives to obtain clandestine abortions. Globally, approximately 13% of all maternal deaths are due to complications of unsafe abortion and the proportion of unsafe abortion increase. In collaboration with WHO, medical abortion with mifepristone and a prostaglandin analogue was developed into a safe and effective method for induced abortion in the 1980ies. Today the prostaglandin analogue of choice is misoprostol and medical abortion is a safe option for termination of pregnancy at all gestational lengths. Several barriers remain that limit global access to safe abortion services. Possible approaches to increase access to medical abortion worldwide include the option to self administer misoprostol at home. Another possibility is to allow task sharing with midlevel providers to allow these health care professionals to be more involved with the care of healthy women undergoing medical abortion. This possibility is likely to have major impact to increase access to safe induced abortion in countries were medical resources are scarce. Another and recently described alternative for women living in countries were access to safe abortion is restricted is to use the telemedicine service provided by “Women on Web” (WoW). Today Internet is a major source of information for people all over the world. On the WoW website, women can do an interactive web-based medical consultation. Women are closely guided in the process through an email or telephone helpdesk. Professional counselling is provided in different languages. Our first analysis showed that outcome of care is comparable to other medical abortion services provided in outpatient settings.

**KNL13**

**Management of the overactive bladder**  
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The Overactive Bladder syndrome (OAB) describes the symptom complex of urinary urgency, with or without urgency incontinence, usually associated with frequency and nocturia(1). Epidemiological studies have reported the prevalence of OAB to be approximately 12-16% of the adult population in Europe and America(2,3). The prevalence increases with age, being 4.8% in women under 25 years to 30.9% in those over 65 years(4). A conservative approach should be offered as a first line therapy including lifestyle advice (fluid management, weight loss, smoking cessation and management of chronic conditions), bladder retraining and pelvic floor muscle training. Drug treatment has an important role in the management of women with OAB; antimuscarinic drugs are the mainstay of treatment. Many preparations are available indicating that there are no ideal drugs and very often the clinical results are disappointing, due to poor efficacy and side effects(6). Comparison of drug therapies for OAB is compounded by a placebo effect of 30%-40% and since the response to any drug is only likely to be approximately 60% any differences detected are likely to be small, thus requiring large scale studies to demonstrate an effect. Should none of the currently available antimuscarinic medications be acceptable, Botulinum toxin can be injected into the bladder but risks causing voiding difficulties and has to be repeated every 6-12 months. Sacral neuromodulation is expensive and prone to failure, but peripheral nerve stimulation may prove to be a less invasive, more cost effective option. Surgery such as clam cystoplasty or ileal conduit diversion can be used

KNL14
Too many Caesarean sections?
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Abstract not available at the time of printing.

KNL15
The problem of Hormone Replacement Therapy (HRT): are there alternatives?
Wolfgang Wuttke
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Abstract not available at the time of printing.

KNL16
Health tourism
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Abstract not available at the time of printing.
SESSION ABSTRACTS

S01.1  
Changes in the health care systems in the Baltic countries after regaining independence  
Riina Sikkut  
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Abstract not available at the time of printing.

S01.2  
Women's reproductive health and services in Baltic countries in last 20 years - challenges and changes  
Helle Karro, Piret Veerus, Dace Rezeberga, Daiva Vaitkiene

Abstract not available at the time of printing.

S02.1  
Meshes and basic science  
Jan Deprest(1), J Vlacil(1), S Manodoro(1), B Klosterhalfen(2), M Endo(1), A Feola(1), Y Ozog(1), D De Ridder(1), E Mazza(3)  
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For years, surgeons have been identifying the anatomical defects to repair and resuspend them using the patient's native tissues. Of the operated women, 29% will require repeat surgery within 1.5 - 12.5 years because of recurrence of symptoms [1], because the native tissues used for the repair inherently have insufficient quality [2]. In analogy to hernia repair, recurrence risk could be reduced by using implant materials. The use of vaginal mesh was boosted after the introduction of synthetic tapes used as a sling for treating genuine stress incontinence [3]. These meshes are configured to match the anatomical defect and are mostly inserted vaginally with purpose designed ancillary devices. U.S. 2010-market data report on 300,000 undergoing POP repair and 260,000 incontinence surgery with one third and eight out of ten using implants [4]. A Cochrane analysis demonstrated improved anatomical outcome following mesh repair of the anterior vaginal wall or vaginal vault, though not the posterior compartment [5]. Subjective improvement neither long term prevention of recurrence remains to be demonstrated [6]. The biocompatibility and biomechanical properties of currently used materials is unfortunately less than desired. Most materials are stiffer and stronger than physiologically required. When they are incorporated into the host, they often become even less compliant leading to vaginal dysfunction. As foreign bodies they trigger an acute inflammatory response, which over time transits to chronic inflammation with angiogenesis as well as deposition of collagen. When this process is imbalanced, Graft Related Complications (GRC) may occur in around 10% of cases [7] [5]. GRC include exposure (also called erosion), contraction (also called shrinkage), spontaneous and induced pain (including dyspareunia), infection, seroma formation, and mesh failure causing reherniation. Mesh contraction is believed to be the result of a vigorous inflammatory response, or later on, contraction by the collagen fibers and/or myofibroblasts within the scar plate [8]. Contraction may cause vaginal dysfunction and spontaneous pain. Chronic pain is probably caused by inflammatory irritation of nerve structures located at the interface [9]. Another complication may be the occurrence of infection, either during surgery or later, by hematogenic route, as well as postoperative wound healing problems [10]. Infection may cause exposure as well as pain and occasionally can be life threatening. 'Biological' implants have been introduced as an alternative. Basically today only xenogeneic acellular collagen matrices are marketed. Whereas we have shown they indeed induce a different, anti-inflammatory cytokine profile and a very mild inflammatory response [11], they are experimentally and clinically prone to degradation (leading to recurrence), neither do they prevent GRC [12, 13]. Because of the high complication rate, the high absolute numbers of patients operated, the Food and Drug Administration (FDA) decided to issue July 13th, 2011 a health notification stating that vaginal mesh placement 'may expose patients to greater risk than other surgical options' because GRC are 'not rare'. Moreover GRC may be difficult to impossible to treat [14]. This situation prompts the need for research into novel, more biocompatible materials ensuring anatomical
and functional restoration of pelvic function, as well as the exploration of alternative strategies, including that of prevention.

4. FDA Health Notification.
14. http://www.fda.gov/MedicalDevices/Safety/AlertsandNotices/ucm262435.htm#.Th3 ej3Bki9s.email

S02.2
Classical methods of prolapse surgery
Michael Halaska
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The choice of methods using autologous tissues requieres the awareness of the 1.anatomy and 2. function.
1. The identification of typical anatomical findings is essential; it includes anterior compartment failures-urethrocele, cystocele, central compartment defects- prolaps of uterus, enterocele and vaginal vault prolapse and finally posterior compartment of urogenital hiatus disturbance- rectocele.
2. The symptoms of malfunction may include urinary incontinence, ischuria, sexual dysfunction, obstipation. The operation of prolapse should not only to restore normal anatomy and function but also aims to prevent the unmasking of hidden pathologies as urethral incompetence -compensated before by the pressure of cystocele - or sexual dysfunction de novo as producing vaginal stricture. The techniques of vaginal repair anterior and posterior, vaginal hysterectomy, sacrospinous fixation and reconstruction of perineal body will be presented and discussed.

S02.3
Heterologous materials for genital prolapse
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The use of heterologous materials (grafts and meshes) to augment anterior, apical and/or posterior repair in an effort to improve outcomes has a long history in Urogynecology and is currently a heavily debated subject, particularly in US after the recent update of the FDA warning. The principal aim is to reinforce “traditional” native tissue repairs. At the beginning, the mesh was used as an overlay lying free or positioned and sutured based on surgeons preference, to augment the durability of the colporraphies. Secondarily, inspired by the trans obturator route of the tension-free vaginal tape as well as the superior results of non-absorbable synthetic meshes in inguinal hernia surgery, the collaborative group of 9 French gynecologists invented the Tension Free Vaginal Mesh (TVM) in 2000, which was a whole new approach to the vaginal surgical repair of POP. This “blind” and “trocar guided” technique avoided traditional colporraphy and treated at the same time “central” and “paravaginal” defects. In 2005, the first commercially available “mesh
kits” were launched on the market and the first results of the Gynecare Prolift™ Pelvic Floor Repair System (Ethicon, Somerville, NJ, USA) were published in 2007. Today, there are a lot of different biologic grafts and synthetic meshes, absorbable (like polyglactin) or non-absorbable (like polypropylene), as well many commercially available mesh delivery systems. Many studies have shown that the use of heterologous materials, whether biologic or synthetic, reduces the risk of recurrence, particularly in the anterior compartment. Contrary to this anatomical advantage, the functional benefit is difficult to prove and limited by the higher risk of complications associated to the use of mesh, especially mesh exposure, but also some other more serious complications. Clearly, the “ideal” mesh has to be discovered…and the decision to use it should be made after a careful consideration of the specific patient characteristics and a detailed discussion about the risks, benefits and alternatives for a very informed consent.

S02.4
Pros and cons of methods of prolapse surgery
Hans van Geelen
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Pelvic organ prolapse (POP) is a common condition and may occur in up to 40-50% of parous women. Most women experience little or no bother but in 11 to 15% bothersome POP symptoms are present. Expectant/conservative management, use of pessaries and surgical approaches are potential treatment modalities depending on severity of symptoms and the stage of prolapse. In total, women have an estimated 12% life time risk of undergoing surgery to repair POP or Urinary Stress incontinence (SUI).(1) The high failure after traditional repair (data in literature differ considerably) and the successful introduction of synthetic material in abdominal hernia repair and in the treatment of SUI (TVT) pushed both manufacturers and clinicians to the introduction and implementation of synthetic meshes in reconstructive pelvic surgery. In 2002 the FDA cleared the first surgical mesh product specifically for use in POP. The recent and widespread transition from traditional POP surgery using native tissue to mesh augmented repair has occurred largely unchecked and is now being subjected to critical analysis and re-evaluation. In 2008 the FDA issued a Public Health Notification (PHN) to inform clinicians and patients of adverse events related to urogynecologic use of surgical mesh. In 2011 the FDA issued a safety communication UPDATE calling into question the safety of these devices and concluded that “the available scientific literature does not provide evidence that surgical mesh used for vaginal POP repair offers a clear improvement in effectiveness when compared to traditional repair”(2). The lack of standardization of traditional reconstructive POP repairs, the huge variety of different types of commercially available mesh kits, the observation that during reconstructive pelvic surgery different procedures are done in combination as well as the absence of a uniform definition of failure or success are a major problem for valid comparisons among the different procedures(3). Recent years have seen a large number of publications regarding the use of mesh for prolapse repair. Most studies on POP surgery are case studies with only a few RCT’s comparing mesh repair vs. non-mesh repair. Even well designed RCT’s are subject to criticism for not addressing surgeon’s factors as a meaningful variable in measuring outcome. However, the large number of published studies and systematic reviews comparing different procedures allow some guarded conclusions. POP repair may be restricted to one compartment (anterior, apical or posterior) but in 60 to 70% of POP repairs two or all three compartments are involved. Reconstructive surgery may use the abdominal or the vaginal route. The decision which approach to use and which procedure to be carried out is mainly determined by individual patient characteristics and the doctor’s preference/experience. Abdominal sacrocolpopexy, as an open approach or by laparoscopy, has proven to be a durable technique for apical support with low recurrence rate and low rates of mesh-erosion (3-4%). The procedure is associated with longer operation time, greater morbidity, higher cost and longer recovery (4). Laparoscopic sacrocolpopexy requires a long learning curve but is an effective procedure with shorter hospital stay. The abdominal route is not always sufficient to treat the anterior and/or posterior compartment so that a concomitant vaginal procedure has to be performed. Several techniques using native tissue as well as a variety of mesh kits have been developed for vaginal prolapse surgery including transvaginal apical suspension. Most of the publications to date would suggest that when compared to conventional POP surgery, mesh augmented POP repair is associated with improved anatomic outcome (POPQ stage 0 or 1) and lower recurrence rates of the treated compartment. However, patient reported outcomes, quality of life parameters and total re-operation rates (for de novo prolapse in another compartment, mesh complications
or incontinence) are similar. In addition, the use of synthetic mesh in the vagina may give rise to different types of complications o.a. mesh exposure, erosion into adjacent organs, and shrinkage of fibrous tissue around the mesh leading to pain and dyspareunia. The introduction of new light weight, macroporous, partially absorbable meshes and procedures that eliminate external needle passes will undoubtedly help to reduce complications. High quality, randomized controlled trials evaluating the long term safety and effectiveness including functional data on sexuality and quality of life are urgently needed.

2. FDA executive summary. Surgical mesh for treatment of women with pelvic organ prolapsed and stress urinary incontinence 2011

S03.1
Osteoarthritis is a disease of the whole joint - encompassing bone, cartilage and synovial inflammation. May estrogen and estrogen related interventions provide benefit to the right patient population?

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The female predominance of polyarticular osteoarthritis (OA) and in particular the marked increase of OA in women after the menopause point to a likely involvement of female sex steroids in the maintenance of cartilage homeostasis. This perception has inspired many research groups to investigate the role of estrogens in the modulation of cartilage homeostasis with the ultimate aim to clarify whether estrogen replacement therapy could provide benefits in preventing the rapid rise in the prevalence of OA in postmenopausal women. Some investigators have investigated the effects of estrogen replacement therapy (ERT) and Selective estrogen receptor modulators SERMs on turnover and structural integrity of articular cartilage in various experimental models, including gold standard OA animal models. Clinically, the effect of estrogens have been evaluated the by post hoc analysis in clinical trials using biochemical markers of cartilage and bone degradation, to evaluate possible chondroprotective effects. Lastly the women health initiative was investigated with regards to the effects of estrogens on the joint and joint replacements. Conclusion: Several animal models have demonstrated structural benefits of estrogens, as well as significant effects on joint inflammation. This is in complete alignment with clinical data using biochemical markers of joint degradation which demonstrated approximately 50% inhibition of cartilage destruction. Timely initiated ERT/SERM treatment may effectively prevent cartilage loss accompanying the menopause. Even though the exact mode of actions still needs to be elucidated, the effect involves both direct and indirect mechanisms on the whole joint pathophysiology. These finding were recently validated in WHI initiate, where women taking estrogen had significant less joint replacement. This suggests that some SERMs and estrogens may positively affect joint health. In conclusion, the pleiotropic effect of estrogens on several different tissues may mach the complicate aetiology of OA in some important aspects.

S03.2
Sexual life after menopause: why and how to protect

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Abstract not available at the time of printing.

S03.3
The androgens deficiency syndrome: how to manage after menopause

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Abstract not available at the time of printing.
In the triennium 2006-2008, 261 women in the UK died directly or indirectly related to pregnancy. The overall maternal mortality rate was 11.39 per 100,000 maternities. Direct deaths decreased from 6.24 per 100,000 maternities in 2003-2005 to 4.67 per 100,000 maternities in 2006-2008 (p = 0.02). This decline is predominantly due to the reduction in deaths from thromboembolism and, to a lesser extent, haemorrhage. For the first time there has been a reduction in the inequalities gap, with a significant decrease in maternal mortality rates among those living in the most deprived areas and those in the lowest socio-economic group. Despite a decline in the overall UK maternal mortality rate, there has been an increase in deaths related to genital tract sepsis, particularly from community acquired Group A streptococcal disease. The mortality rate related to sepsis increased from 0.85 deaths per 100,000 maternities in 2003-2005 to 1.13 deaths in 2006-2008, and sepsis is now the most common cause of Direct maternal death. Cardiac disease is the most common cause of Indirect death and the commonest overall cause (53 deaths, rate of 2.31 per 100,000, 20% of all deaths); the major causes of cardiac deaths over the last ten years are acquired heart disease: cardiomyopathy (predominantly peri-partum), myocardial infarction, dissection of the thoracic aorta and pulmonary hypertension. Rheumatic heart disease has re-emerged as a cause of maternal death and is encountered most commonly in migrant women. The Indirect maternal mortality rate has not changed significantly since 2003-2005. This Confidential Enquiry identified substandard care in 70% of Direct deaths and 55% of Indirect deaths. Many of the identified avoidable factors remain the same as those identified in previous Enquiries. Recommendations (including a 'Top Ten') for improving care have been developed. Medical diseases, either pre-existing or new onset in pregnancy, are now the commonest cause of maternal death in the UK. Successive reports of the Confidential Enquiries into maternal deaths have demonstrated no significant fall in the number of these maternal deaths due to 'indirect' causes over the last 20 years. Furthermore, the majority of these deaths are associated with substandard care, and in one-third of cases this is classified as major substandard care, where different care might have prevented death of the mother. This substandard care includes failure to appropriately diagnose, investigate and treat women with new onset chest pain, headache or other medical symptoms. This often arises when well-meaning clinicians prioritise the health of the fetus over that of the mother, withholding essential investigations or drugs, resulting in the demise of both mother and fetus.

Introduction: Maternal mortality is considered a major marker of the performance of the health care system in a country. The aim of our investigations was to analyse as well as to compare the main trends of maternal mortality in Hungary between the periods 1978-1987 and 1997-2010. We aimed to examine not only the mathematical characteristics of this fatal obstetric complication, but we also wanted to scan the single causes of maternal mortality. Demographic, clinical and other non-medical informations were also observed to clear the background of this condition.Materials and methods: We assessed 358 and 146 cases of maternal death between 1978-1987 and 1997-2010. The sources of our data were the Hungarian Central Bureau of Statistics as well as The National Institute of Obstetrics. (Informations regarding the period between 1988 and 1996 were not available, due to administrative changes in the health care system induced by the the political changes.) We categorized the causes of maternal mortality into three groups: one containing the direct obstetric causes of maternal death (thromboembolic complications, sepsis, haemorrhagic shock and preeclampsia), the next summarizing other possible obstetric-gynecologic causes (extraterine gravidity, spontaneous and arteficial abortion) and the last for other etiology (diseases, accidents etc.). Medical and statistical analysis of the available data made the characterization of the main trends of the maternal mortality in Hungary possible. Results: The median ratio of maternal mortality rate per 100000 live births between the two compared periods decreased from 26.5 to 9.2. The ratio of the cases of maternal death...
compared to the number of all the live births showed also a significant decrease: from 0.026% to 0.01%. In both periods in the majority of the cases (53 vs 57%) maternal age was above 30 yrs. In more than 60% of all cases in both periods the gestational age at birth was under 37 weeks. Analysing the background of maternal death, direct obstetric causes showed an increase (49.4 vs. 62.2), while the occurrence of extraterine gravidity and abortion decreased significantly. Concerning the direct obstetric causes, the incidence of preeclampsia and sepsis have been stagnated, while haemorrhagic shock showed a significant decrease in its incidence. It is worth mentioning that no maternal death due to anaesthesiological intervention have been occurred between 1997-2010, while in the other examined period it proved to be a significant etiological factor of maternal mortality. Discussion: Our analysis of the available Hungarian data for maternal mortality between 1978-1987 and 1997-2010 has shown a substantial decline in maternal deaths. Despite the increasing average age of the pregnant women, several factors have been playing an essential role in this process. First, the improvement of the health care system, the applied protocols of obstetrics, as well as the better preparedness of medical staff all have been contributing to the decrease of maternal mortality rate. It must be emphasized, that while the frequency of cesarean section have been increased, the maternal mortality due to anaesthesiological complication has been reduced to zero, mainly due to the application of spinal anaesthesia versus narcosis. Second, income per head, which can affect maternal mortality through several channels from nutritional status to physical access to health care has been rising in our country. Last not least maternal educational attainment showed also a strong correlation to the changes of maternal mortality.

S04.3
Maternal mortality and severe morbidity in Italy
Serena Donati
Italian National Institute of Health, National Centre for Epidemiology, Surveillance, and Health Promotion, Rome, Italy

Abstract not available at the time of printing.

S04.4
Trends in maternal mortality in The Netherlands
Joke Schutte
Isala Klinieken Zwolle, Department of Obstetrics and Gynaecology, Zwolle, The Netherlands
On behalf of the Dutch Maternal Mortality Committee of the Netherlands Society for Obstetrics and Gynaecology

Introduction: Maternal mortality is worldwide seen as a valid indicator of the standard of obstetric care in a country. The number of maternal deaths is relatively low in high income countries, indicating high standards of obstetric care. Still, in the Netherlands 12.1 women died per 100,000 live born children in the period 1993-2005: that is one pregnant or recently delivered woman per 15 days. Every death is one to many, however, and every death is a very traumatic event, for the people left behind, but also for the people who were involved in the management of the care of the woman. To evaluate the quality of obstetric care, it is important to study the level of care given in every case of maternal death, next to the analysis of the exact number of maternal deaths. Substandard care factors can lead to learning points. These learning points can be used in guidelines, and the implementation of these guidelines should lead to improvement of the quality of care, and eventually to a reduction in maternal mortality and morbidity. To study these factors, the Netherlands Society of Obstetrics and Gynaecology (NSOG) installed the Dutch Maternal Mortality Committee (MMC) in 1981. The results of the analysis are presented to the members of the NSOG every three years, next to (inter)national publications and presentations. Material and methods: All cases of maternal mortality in the period 1993-2008 were collected by the MMC and were classified for cause of death. Also, the quality of care provided was analysed. The MMC consists of eight gynaecologist and one internal medicine specialist, working in the field of maternal medicine. The members are from both university as non-teaching hospitals. Maternal mortality cases were reported to the MMC on a voluntary basis by gynaecologist, midwives and general practitioners. Some cases were identified by a cross-check with data collected by the vital statistics system by Statistics Netherlands. All cases were anonymised. Maternal mortality was classified according to the definitions by the World Health Organisation’s
International Classification of Diseases, 10\textsuperscript{e} revision (ICD-10). Deaths were classified as Direct deaths (with a cause directly related to pregnancy), Indirect deaths (with an underlying cause of disease, aggravated by the physiologic effects of pregnancy) and fortuitous deaths (with no relation to pregnancy). The Maternal Mortality Ratio (MMR) is the number of women who die during pregnancy or during or shortly after delivery, per 100,000 live-born children. Late Maternal Mortality is maternal mortality more than 42 days after delivery, but within one year after delivery. Substandard care is defined as all care factors which may have resulted in low standards of care and which had a probable negative influence on the chain of events leading directly to death. Results: In the period 2006-2008 79 cases were identified. A total of 74 cases were directly reported to the MMC, and five cases were identified using the cross check with Statistics Netherlands (6\%, 5/79). The classification of these cases is listed in Table 1: 29 direct cases and 32 indirect cases. Seven cases were late maternal deaths (all indirect maternal deaths). The MMR thus was 9.8 (54/551,027 live-born children). The trend over time is given in figure 1. Statistics Netherlands reported in this period 32 cases of maternal mortality. Under reportage in vital statistics in the Netherlands was thus 48\%. The causes of direct and indirect deaths are listed in table 2 and 3. Direct maternal mortality is still the most common cause of death, but the most common single cause of maternal mortality is in this period maternal mortality due to cardiovascular diseases. Conclusion: The MMR was 9.8 in the period 2006-2008. In the period 1993-2005 the MMR was 12.1.\textsuperscript{1} The number of maternal deaths seems to lower. This is the first period of reportage from the MMC in which the most common cause of death is a indirect cause, mortality due to cardiovascular diseases. Overall, direct deaths are still most common, but pre-eclampsia, for years the number one cause of maternal mortality in the Netherlands, now becomes the next most common cause. In the United Kingdom, this shift has taken place years ago.\textsuperscript{2}

References:

<table>
<thead>
<tr>
<th>Classification</th>
<th>Total (n)</th>
<th>Late maternal mortality (n)</th>
<th>Available for analysis (n, %)</th>
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<tbody>
<tr>
<td>Direct deaths</td>
<td>29</td>
<td>0</td>
<td>25 (86%)</td>
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<tr>
<td>Indirect deaths</td>
<td>32</td>
<td>7</td>
<td>31 (97%)</td>
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<tr>
<td>Fortuitous deaths</td>
<td>18</td>
<td>11</td>
<td>18 (100%)</td>
</tr>
<tr>
<td>Total</td>
<td>79</td>
<td>16</td>
<td>74 (94%)</td>
</tr>
<tr>
<td>Fortuitous/late maternal mortality excluded</td>
<td>61</td>
<td>56 (92%)</td>
<td></td>
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<table>
<thead>
<tr>
<th>Cause</th>
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<tr>
<td>(pre)eclampsia</td>
<td>9</td>
<td>1.6</td>
</tr>
<tr>
<td>Trombo-embolism</td>
<td>8</td>
<td>1.5</td>
</tr>
<tr>
<td>Major obstetric haemorrhage</td>
<td>3</td>
<td>0.5</td>
</tr>
<tr>
<td>Obstetric infection</td>
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<td>0</td>
</tr>
<tr>
<td>Ectopic pregnancy</td>
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<tr>
<td>Unknown cause</td>
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<td>1.3</td>
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<tr>
<td>TOTAL</td>
<td>29</td>
<td>5.3</td>
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</table>

N= number of cases, including late maternal mortality.
MMR= Maternal Mortality Ratio, excluding late maternal mortality.
Table 3. Indirect maternal mortality 2006-2008.

<table>
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<tr>
<th>Cause</th>
<th>N</th>
<th>MMR</th>
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<tr>
<td>Cardiovascular diseases</td>
<td>17 (3 late)</td>
<td>2.5</td>
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<tr>
<td>Cerebrovascular diseases</td>
<td>3</td>
<td>0.5</td>
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<tr>
<td>Infection, non obstetric</td>
<td>5</td>
<td>0.9</td>
</tr>
<tr>
<td>Suicide</td>
<td>4 (1 late)</td>
<td>0.5</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>3 (2 SLE (1 late), 1 epilepsy)</td>
<td>0.4</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>32 (7 late)</td>
<td>4.9</td>
</tr>
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N= number of cases, including late maternal mortality.
MMR= Maternal Mortality Ratio, excluding late maternal mortality.

Figure 1. Trend in Maternal Mortality in the Netherlands, 1993-2008.

MRR= Maternal Mortality Ratio, excluding late maternal mortality.

S05.1
III° anal sphincter tear - prevention
Engelbert Hanzal
Medical University of Vienna, Department of Obstetrics and Gynaecology, Vienna, Austria

Anal sphincter injury during childbirth is a major contributor to fecal incontinence, the prevalence of which is estimated to as high as 9% in women of all age groups according to population based research. The prevalence of III° and IV° perineal tears has been found to range around 3% among women with vertex deliveries at term. Risk factors for obstetric anal sphincter trauma include nulliparity, episiotomy, instrumental delivery, older age at birth, larger infant, longer gestation and prolonged second stage. While episiotomy has been heralded as a panacea against perineal trauma including all its sequelae for much of the 20th century advocates for its routine use have become rare since systematic reviews have found that it appears to increase the risk of anal sphincter injury. Currently there is no direct evidence regarding preventive strategies for obstetric anal sphincter injuries, therefore measures for limiting prevalence focus on prevention of perineal tears in general. Prevention of perineal injury during delivery includes: restrictive use of episiotomy, avoidance of median episiotomy, use of vacuum extraction instead of forceps in case of operative vaginal delivery and perineal massage during late pregnancy. A hands-off approach and use of warm compresses during the second stage of labor may also contribute to a reduction in perineal trauma. Cesarean section should be discussed in prevention of a second anal injury and in the presence of risk factors. For now, in light of the overall prevalence of obstetric sphincter trauma and absence of evidence for the effectiveness of cesarean section to avert fecal incontinence, its use as a general preventive strategy cannot be substantiated.
S05.2
Reconstructive therapy of III° anal sphincter tear
Ralf Tunn
St. Hedwig Hospital, Department of Urogynecology, Berlin, Germany

The reconstructive therapy of III.° anal sphincter tear by overlapping technique will demonstrated in the primary and secondary situation. Models and cadavers will additionally used to explain each step of reconstruction. The pre- and postoperative care will discussed.

S05.3
Sacral neuromodulation in cases of anal incontinence after anal sphincter tear
Kathrin Beilecke
St. Hedwig Hospital, Department of Urogynaecology, Berlin, Germany

Demonstration of indication, technique (test and implantation), results and complications of sacral neuromodulation (SNS) in women with anal incontinence after anal sphincter tear. Videos will explain all steps of surgery, the current literature about outcome will discussed.

S06.1
Histopathological classification of endometrial carcinomas. Pitfalls and challenge
Sigurd Lax
General Hospital Graz West, Department of pathology, Graz, Austria

Abstract not available at the time of printing.

S06.2
Diagnosis and primary surgery for endometrial carcinomas
Helga B Salvesen
Haukeland University Hospital, Department of Gynaecology and Obstetrics, Bergen, Norway

The majority of endometrial carcinomas are diagnosed at early stage. Still, 15-20% recurs with limited effect of systemic therapies in metastatic disease. Improved ability to target surgical and systemic therapies to well selected patient populations will increase the likelihood of benefits. In the clinical setting, one of the key challenges is to correctly identify high-risk patients from low-risk patients prior to primary surgery, to provide a better basis for individualized treatment. Available tools for planning of the surgical procedure are discussed. These may facilitate referral to specialized units when indicated, and potentially reduce morbidity from extensive surgery within the low-risk groups. More aggressive surgical therapy including pelvic- and para aortic lymph node removal has been implemented over the last decades for high risk endometrial carcinomas. Although no survival benefit from lymphadenectomy has been documented in randomized trials, improved risk stratification related to the procedure, may be beneficiary.

S06.3
Adjuvant treatment for early stage endometrial cancer - what is the evidence?
Raza Mirza Mansoor
Copenhagen University Hospital - Rigshospitalet, Department of Oncology 5073, Copenhagen, Denmark

Abstract not available at the time of printing.
Functional hypothalamic amenorrhea – the problem of adolescence

Zana Bumbuliene
Vilnius University Faculty of Medicine, Department of Obstetrics and Gynecology, Vilnius, Lithuania

Functional hypothalamic amenorrhea (FHA) is defined as a non-organic and reversible disorder characterized by the absence of menstruations due to the suppression of the hypothalamic–pituitary–ovarian axis, and is ultimately a diagnosis of exclusion. FHA in adolescent girls can be the primary and secondary. There are three main types of FHA: weight loss related (severe dieting, eating disorders), exercise related (heavy training) and stress related (intensive emotional events) amenorrhea. If these factors occur in early puberty they cause delayed puberty, after menarche adolescents typically present with amenorrhea of 6 months' duration or longer. The adolescent girl should be asked about weight loss, physical activity and psychosocial stressors. The physical examination should focus on identifying galactorrhea, thyroid dysfunction, and evidence of hyperandrogenemia. Patients with FHA typically have a low level of serum estradiol, LH and low-to-normal levels of FSH. If no other cause of amenorrhea is identified, the patient should be educated regarding the influence of the excessive exercise and weight loss on menstrual cycles and the risks of associated bone loss. In treatment the multidisciplinary approach including a primary care physician, nutritionist, gynecologist and psychotherapist can be necessary. Adolescence is a critical period for bone accretion, as over half of peak bone mass is achieved during this period. In young women with persistent hypoestrogenism, the bone mass can decrease at a rate of 2-5% per year. Hormone replacement therapy is important in the treatment of these patients, although the exact role of estrogen/progesterone therapy in the amenorrhea associated with anorexia nervosa or exercise remains controversial.

Evaluation and management of adolescent amenorrhea

Efthimious Deligeoroglou
Athens University Medical School, Department of Obstetrics & Gynaecology, Athens, Greece

Adolescence is a transitional stage period between 10 and 19 years of age, characterized by major mental and physical changes. In females, thelarche indicates the beginning of the corporal changes of adolescence and precedes menarche by a mean interval of 2.7 and 2.5 years for black and white girls respectively. Breast development at the time of menarche is in the majority of the cases at Tanner stage IV and more rarely at stage III. Menarche is unquestionably the most significant corporal change occurring during adolescence. It usually occurs between the ages of 12 and 13 in girls of developed countries, while the median age is considered to be 12.43 years. Irregular menstruation during the early years of menarche is common. Amenorrhea, defined as complete absence (primary amenorrhea) or cessation of menses for more than 6 months (secondary amenorrhea), requires careful evaluation and management. Possible causes include: anatomical or functional anomalies of the genital tract, hormonal disorders and multifactorial reasons. It is most commonly due to hypothalamic amenorrhea, polycystic ovarian syndrome, hyperprolactinemia and ovarian failure. Thorough medical history and careful clinical examination of the young girl is essential and distinction between primary and secondary amenorrhea, together with the presence or absence of secondary sexual characteristics development will guide the physician to the differential diagnosis of amenorrhea. Essential laboratory tests include: Follicle Stimulating Hormone (FSH), Luteinizing Hormone (LH), Thyroid-Stimulating Hormone TSH and prolactin measurements. In the presence of acne or hirsutism, androgen levels should also be measured. Management should focus on the restoration of ovulatory cycles and the prevention of short- and long-term consequences of hormonal imbalance, while the diagnosis should be followed by the appropriate medical or surgical treatment and psychological support of the young girl. References: 1. Diaz A, Laufer MR, Breech LL. Menstruation in girls and adolescents: using the menstrual cycle as a vital sign. Pediatrics. 2006 Nov;118(5):2245-50. 2. Deligeoroglou E, Athanasopoulos N, Tsimaris P, Dimopoulos KD, Vrachnitis N, Creatsas G. Evaluation and management of adolescent amenorrhea. Ann N Y Acad Sci. 2010 Sep;1205:23-32. 3. Deligeoroglou E, Tsimaris P, Deliveliotou A, Christopoulos P, Creatsas G. Menstrual disorders during adolescence. Pediatr Endocrinol Rev. 2006 Jan;3 Suppl 1:150-9.
**S07.3**

**Juvenile metrorrhagia: access to treatment**

Jan Horejsi  
Charles University Prague, 2nd Medical Faculty, Department of Obstetrics & Gynaecology, Prague, Czech Republic

Aim: The aim of the study is to analyse causes and treatment modalities of menstrual irregularities in adolescents. Results: Juvenile metrorrhagia is dysfunctional uterine bleeding (DUB) in adolescent girls. It has its specific both in diagnosis and in therapy, often different from those used in adults. The predominant cause of juvenile metrorrhagia is hormonal dysregulation, anovulatory cycles, hematologic disease, infection or combination of reasons. The most often used treatment include both non hormonal and hormonal therapy. Milde disorders can be treated without hormones, in heavy and/or prolonged bleeding with secondary anaemia hormonal therapy is necessary. The best method of medication include combination of parenteral estrogen with gestagen, other possibilities of therey is discussed. The aim of first phase of treatment is to stop the bleeding using estrogens, then withdrawal of dysfunctional endometrium by progesteron is necessary. The prevention of relapses must be done minimally for 3 consecutive months. The regimen of treatment is neccessary to compose individually due to the cause and clinical course. Therapy using contraceptive pills will be discussed. Juvenile metrorrhagia requires only exceptionaly a surgical intervention. Conclusion: Recent posibilities of diagnosis and treatment deminish the need of blood tranfusion, admition to the hospital and surgical procedures.

**S07.4**

**Dysmenorrhea in adolescents**

Gabriele Tridenti, B Battista La Sala  
Santa Maria Nuova Hospital, Department of Obstetrics and Gynaecology, Reggio Emilia, Italy

Dysmenorrhea' means 'difficult menstrual flow'. It is characterized by: lower abdominal cramps requiring medication or limiting normal activity, accompanying the start of menstrual flow or occurring within a few hours before or after its onset, lasting 24-48 hours, correlated with ovulatory cycles and with the duration and amount of menstral flow. Other symptoms, such as nausea, vomiting, headache, dizziness, fatigue are often present. We distinguish: primary dysmenorrhea (PD) with no identifiable pelvic pathology and secondary dysmenorrhea (SD) when menstrual pains are associated with underlying pelvic diseases. It is the most frequent gynaecologic complaint in teenagers, starting 2 - 3 years after menarche with the onset of ovulatory cycles. 60-70 % adolescents report painful menses, 15% with interruption of daily activities. PD (90% cases), follows the premenstrual release of -6 fatty acids from cell membranes, producing prostaglandins and leukotrienes, with cramps and systemic symptoms. SD (10% cases) is mostly due to endometriosis and obstructive congenital anomalies, but it may be associated to PID, STD, adenomyosis, pelvic adhesions, cervical stenosis, pregnancy complications… The diagnosis of PD is mostly clinical, based on history and physical exam. Laboratory testing, imaging, hysteroscopy and laparoscopy may be useful mostly to detect SD. Several therapeutic options exist: non medicinal / medicinal treatments, surgical procedures, alternative medicine. Non medicinal treatments include exercise, acupuncture, topic heat, magnetic devices, but further studies are required. NSAIDs are the first line treatment, to start at the onset of bleeding. Hormonal treatments are the second step option, and combined OCs should be preferred; an extended cycle treatment, 3 months lasting, is advisable with heavier symptoms. GnRH agonists, effective both on PD and endometriosis, must not be prescribed in aged under 16 adolescents. Bone demineralization may occur with prolonged use (>6 months). Laparoscopy is recommended if both NSAIDs and OCs are unsuccessful, mostly to diagnose and treat endometriosis. Complementary and alternative medicine (Vitamin B1, B6, E, Magnesium, fish oil) has often conflicting results, and further studies are required: Magnesium is more effective than placebo.
Premature ovarian failure

Sophia N Kalantaridou
University of Ioannina Medical School, Division of Reproductive Endocrinology, Department of Obstetrics and Gynecology, Ioannina, Greece

Premature ovarian failure (POF) is a condition characterized by sex steroid deficiency, amenorrhea, and elevated gonadotropins in women younger than 40 years of age. In general, women with POF have normal fertility before the disorder develops. Women with POF have intermittent ovarian function and spontaneous pregnancies have occurred after the diagnosis of POF. Remissions of ovarian function are temporary, but they may also last for years. The premature cessation of ovarian function strongly interferes with fertility and family planning. There are no proven therapies to improve ovarian function and increase fertility rates in women with spontaneous POF. The only POF etiology that should theoretically respond to therapy is autoimmune oophoritis. Placebo-controlled trials of steroid treatment are underway to test this treatment. The role of androgens in POF fertility treatment is currently under investigation. Until recently, oocyte or embryo donation has been the only successful fertility method for women with spontaneous POF. An important issue for oocyte donation is the need for FMR1 testing. This is particularly important in women with POF who are tempted to ask for oocyte donation from a relative who may also carry a fragile X premutation and who might be at risk for donating an oocyte with a full fragile X mutation. Today newer techniques, such as cryopreservation of mature and in vitro matured oocytes and ovarian tissue, became available. Ovarian transplantation has been performed in rare cases in which the patient has an identical twin with normal ovarian function. Further research is needed for the development of effective fertility therapies for women with POF who have follicles remaining in the ovary.

Vitrification of oocytes and embryos

Saafa Al Hasani
University of Schleswig-Holstein, Department of Gynaecology and Obstetrics, Lübeck, Germany

Introduction: Slow-cooling (SC) cryopreservation of supernumary pronuclear stage oocytes during IVF/ICSI is well established and routinely implemented in the clinical IVF-programme. Recently, worldwide high survival and pregnancy rates with Cryo-Embryotransfer by vitrification using minimum volume cooling method have been reported. The radical strategy of vitrification is to result in a total elimination of ice crystal formation, both within the cells being vitrified (intracellular) and the surrounding solution (extracellular). In the present study, we examined the survival rate of vitrified and rewarmed human pronuclear stage oocytes that were cultured for additional 24 h before Cryo-ET as well as to evaluate the pregnancy rate. The results were compared to survival- and pregnancy rate using the slow-cooling cryopreservation method retrospectively. Material and Methods: Between January 2000 and November 2005 a total of 752 patients had 3616 supernumary zygotes during IVF/ICSI treatment. These zygotes were cryopreserved using the slow-cooling method. A total of 1005 supernumary zygotes from 211 other patients were vitrified between April 2004 and January 2008 using the Cryotop (Kuwayama, RBM-online, 2005, pp 608-615). For vitrification, zygotes were placed into equilibration solution (7.5% Ethylenglycol; 7.5% DMSO) and incubated for 8 min. at room temperature (RT). Hereafter zygotes were incubated in vitrification solution (15% Ethylenglycol; 15% DMSO; 0,5M Saccharose) for 45-60 sec. at RT and placed on the Cryotop-strip and were plunged directly into the liquid nitrogen. After Vitrification a hard plastic cover is attached to protect the strip during storage in liquid nitrogen. In total 1438 zygotes were thawed according to the conventional Slow-cooling-protocol. 107 zygotes were rewarmed after being vitrified: the hard plastic cover was removed in liquid nitrogen and the Cryotop was plunged in thawing solution (1M Saccharose) at 37 C for 1 min. Zygotes were placed in diluent solution (0,5M and 0.25M Saccharose) at RT each for 3 min. Washing was done many times before culture. After both procedures, vitality of zygotes was evaluated under dissecting microscope one hour after rewarmed. Embryo transfer was done 24 hours after culture in programed cycles. Clinical pregancies per Cryo-ET were evaluated and compared for both methods. Results: In total 1438 zygotes were thawed after being cryopreserved with the slow-cooling method. 848 zygotes seemed to be vital after thawing with a survival rate of 59%, while 381 zygotes were rewarmed after being vitrified corresponding to a survival rate of 96.3%. 583 patients underwent Cryo-ET
after Slow-cooling procedure of zygotes. The clinical pregnancy rate per Cryo-ET was 10.2% (n=111). In contrast 115 patients underwent Cryo-ET after vitrification of zygotes. Pregnancy rate was 33.3% (n=69). Out of these 39 healthy babies were born. Conclusion: These retrospective comparative results clearly demonstrate, that the Cryotop vitrification method of supernumary zygotes showed a high post-thaw survival and pregnancy rates suggesting that the Vitrification-protocol may be preferable because of its simplicity, cost-effectiveness and time saving in a busy laboratory daily-work.

S08.3
Fertility treatment of PCO
Ioannis E Messinis
University of Thessalia Medical School, Department of Obstetrics and Gynaecology, Larissa, Greece

Abstract not available at the time of printing.

S09.1
Endometriosis and cancer
Lone Hummelshøj
Editor-in-Chief, Endometriosis.org, London, United Kingdom

Abstract not available at the time of printing.

S09.2
Drugs cannot cure endometriosis, and neither can surgery
Christian M Becker
University of Oxford, Nuffield Department of Obstetrics and Gynaecology, Oxford, United Kingdom

Endometriosis is a common disease affecting approximately 5-10% of women mostly during their reproductive life span. Affect women commonly suffer from pain symptoms such as dysmenorrhea, deep dyspareunia and abdominal pain as well as from reduced fertility. Whilst various hypotheses have been proposed trying to explain disease development and progression many underlying pathomechanisms still remain enigmatic. It is widely accepted thought that growth of endometriotic lesions is hormone dependent. Hence, most therapeutic approaches to endometriosis aim at local or systemic suppression of estrogen production. This presentation will focus on existing data investigating the role of medical and surgical therapy for endometriosis. It will highlight the potential use and ethical implications of evaluated questionnaires, imaging, repeated surgery and biomarkers. Various levels of evidence will be discussed with regards to therapeutic efficacy, morbidity and mortality as well as recurrence rates.

S09.3
Pain and endometriosis
Philippe Koninckx
KU Leuven, Department of Gynaecology, Leuven, Belgium

Abstract not available at the time of printing.
S09.4
Endometrium and endometriosis
Thomas D’Hooghe, A Fassbender
University Hospitals Gasthuisberg, Leuven University Center of Reproductive Medicine, Leuven, Belgium

In this invited lecture, a review will be given on the difference in endometrial biology between women with and without endometriosis using a classical approach (hypothesis driven research investigating predefined biological compounds) and a ‘systems biology’ approach using RNA microarray and proteomic approaches. The quality of these data will be discussed with respect to pathogenesis and diagnosis of endometriosis and to endometriosis-associated infertility. More specifically, the question will be addressed if endometrial biological differences between women with and without endometriosis are caused by endometriosis, or do cause endometriosis. Finally, we will discuss the possibility to use the analysis of eutopic endometrium with respect to the density of nerve fibers as a semi-invasive diagnosis of endometriosis in symptomatic women without evidence of endometriosis on gynecological ultrasound examination.

S09.5
Stem cells in human endometriosis
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The existence of stem cells in human endometriosis has been already demonstrated, and their presence has been hypothesized to be at the basis of the high frequency of recurrence of the disease. Herein is presented a study aimed at characterizing the proliferation, migration and angiogenic properties of mesenchymal stem cells (MSC) from ectopic and eutopic endometrial tissue and to investigate the effect of the tyrosine kinase inhibitor Sorafenib on them. Patients receiving surgical treatment for pelvic endometriosis and control patients without endometriosis undergoing surgery for benign gynaecological diseases were included. MSC lines were isolated from ectopic and eutopic endometrial tissue. We observed that ectopic endometrial MSC from patients with endometriosis show a higher proliferation, migration and angiogenic ability than eutopic MSC from the same patient or control MSC from patients without endometriosis. Sorafenib effectively reduced the proliferation, motility, ezrin phosphorylation, VEGF release and HIF-1α expression of ectopic MSC. In conclusion, we showed that the increased proliferative, migratory and angiogenic phenotype of ectopic MSC may be reverted by treatment with Sorafenib. Targeting of the MSC population involved in sustaining the ectopic lesions might be useful in eradicating endometriotic implants.

S10.1
Basic research and vulvodynia treatment options
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According to the ISSVD classification, vulvodynia can either be generalized or localized (Moyal-Barracco et al 2003). The most common presentation of vulvodynia in young women is the localized provoked vulvodynia (LPV); where the area affected usually is situated around the vaginal introitus. Among the affected women the majority has had a period of pain-free intercourse-secondary LPV in contrast to primary LPV with pain at first intercourse or tampon use. Pathophysiological changes to the vulvar vestibular mucosa as well as endogenous pain modulation will be discussed. The etiology is currently considered multi-factorial and may include contributing triggers such as infections, hormonal influence, psychosocial factors, and immunological as well as genetic factors. The generalized, unprovoked vulvodynia is more common in older women; however mixed forms of provoked and unprovoked pain occur. The pain is most likely of neuropathic origin and it is important to rule out pelvic nerve compression. An MRI could be valuable in selected cases. Localized provoked vulvodynia-treatment options:

- General information- Explain pain mechanisms, possible etiology together with a supportive attitude
- Vulvar care measures- Avoid irritants, general hygiene information.
• Topical treatments- Lidocaine gel (2%) or cream (5%) for desensitization. Both nightly use as well as frequently daytime use can be considered. Topical estrogens may be tried. Corticosteroids have been shown non effective and should be avoided. Topical capsaicin have shown major side effects.
• Antidepressants- Tricyclic antidepressants such as desipramine and amitryptilin may be used in doses of 50-75 mg at night. Start at 10 mg and inform of side effects.
• Anticonvulsants- Gabapentin and its precursor pregabalin are commonly used for neuropathic pain and could be an option.
• Injections- botulinum injections are used to treat muscle spasm and can also interfere with pain transmission. Although one randomized study have shown no significant difference there are numeral case reports reporting effect. Interferon injections are not effective.

Generalized unprovoked vulvodynia treatment options include antidepressants or anticonvulsants.

S10.2
Skin diseases as a cause of vulvodynia, general examination and investigation
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The most common chronically dermatological diseases in the Vulval area are:
1. psoriasis (PS)
2. dermatitis (eczema)
3. lichen sclerosis (LS)
4. lichen planus (LP)
They may mimic each other, but there are also special characteristics for each that can help us differentiate them. The main common symptom is itching. -The psoriasis patients usually have other lesions on typical locations characteristic for the disease. The family history may reveal as much as 50% genetic predisposition. The Vulval psoriasis tends to be located in the hairy area of the labia major, and do not affect the mucosa. -The dermatitis or eczema may be seen in atopic patients. Apart from the vulval symptoms, they often present with itchy dry skin elsewhere and usually there is a family history of atopy. Underlying allergy must be elaborated, although this is not seen very often. The location in the vulva is the same as in psoriasis, but the affected lesion border will usually be less clearly defined. -Vulval lichen sclerosus has the most itching symptoms of these 4 skin diseases, affecting mostly menopausal women, but also children. It usually affects only vulva, never the vagina. Clinically it may mimic the lichen planus, but responds better to treatment. A biopsy will usually give the diagnosis. -Genital erosive lichen planus is relatively rare. It is difficult to treat and affects both vulva and vagina with painful, sore erythema and erosions in the mucosa. Both LS and LP may give alterations in the anatomical structure with absorption of the labia, stenosis and eventually total obliteration of the vagina. Treatment. Psoriasis and dermatitis are usually treated with mild to moderate potent steroids. LS and LP respond only to potent topical steroid cream or foam, although for LP the response is mostly moderate and newer therapies are currently investigated.

S10.3
Somatocognitive therapy improves the self-reported pain levels, respiration and movement patterns and psychological health in women with vestibulodynia.
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(3) Sunnaas Rehabilitation Hospital and Oslo University College, Oslo, Norway

Background: Somatocognitive therapy (SCT) has been developed as a hybrid of physiotherapy and cognitive psychotherapy. In this short term body oriented therapy, the goal is to achieve new body awareness related to the activities of daily living and replace dysfunctional cognitive schemata related to somatosensory and emotional experiences. The working alliance between therapist and patient is important for therapy outcome. This study investigated whether short term SCT improves pain level, motor patterns and psychological distress. Methods: 25 women with VD were recruited to an Out Patient Department, motor patterns assessed with the Standardized Mensendieck Test (SMT, assessing posture, movement, gait, sitting posture and respiration). Pain level was assessed by means of a VAS score, and psychological distress
evaluated by GHQ -30. The patients received 12 sessions of SCT, with similar assessment after therapy. Three patients were subjected to an open interview before and after treatment. Results: For the first 10 women included in the study, the average age was 24 years, and average duration of pain 2.1 years. They were educated to a bachelor level or above. After therapy, VAS scores were reduced on average 66 %, and for motor function assessed with SMT, gait scores improved by 56 % and respiration by 88%, (see also fig. 1). The level of psychological distress was significantly reduced after therapy. The women also expressed less pain and more pleasure during sex after therapy.

![Figure 1 Somatocognitive therapy improved motor patterns and reduced pain in women with provoked vestibulodynia.](image)

Conclusions: Somatocognitive therapy is a new approach that appears to be very promising in the management of chronic gynaecological pain. Short term outpatient treatment significantly reduces pain experience and improves motor function and patients express more pleasure during sex function. Further data will be presented at the conference.

**S10.4**

**Surgical treatment of vulvodynia**

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Abstract not available at the time of printing.

**S10.5**

**Vulvodynia and sexual dysfunction**

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Introduction: Vulvodynia is one of the major possible causes of sexual pain and is thus part of the differential diagnosis in women complaining about dyspareunia. Dyspareunia is either conceptualized as sexual dysfunction or as pain disorder. In this context the question arises whether the clinical management of vulvodynia should be based on chronic pain concepts or on concepts oriented towards sexual dysfunction. Methods: Review of the literature regarding the impact of vulvodynia on global sexual function and the therapeutic concepts for treatment. Results: Patients with vulvodynia suffer from generalized impairment of their sexual function including desire, arousal, orgasmic function and sexual satisfaction. It remains unclear whether these dysfunctions are a direct consequence of experiencing pain during intercourse and thus developing an avoidant behavior or if the more general sexual dysfunction is pre-existing and contributing to the development of vulvodynia. There seems to be a subgroup of patients where vulvodynia leads to dyspareunia without major impact on desire and sexual satisfaction. These patients seem to develop behaviors which allow them to experience sexual pleasure. In general the therapeutic concepts are based on chronic pain treatments. Focus seems to be much less on interventions based on sex and couple therapy. Conclusion: The impact of vulvodynia on female sexual function is not limited to dyspareunia but frequently affects all domains of the woman's sexual health. Multimodal therapy concepts should integrate approaches known from chronic pain treatment and sex and couple therapy interventions.
S11.1
Simulation training of gynecological and early pregnancy ultrasound
Simon Grant
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Abstract not available at the time of printing.

S11.2
Simulation of laparoscopic and hysteroscopic techniques
Frank Willem Jansen
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Abstract not available at the time of printing.

S11.3
Sustainable simulation-based programmes in obstetrics
Diogo Ayres-de-Campos
University of Porto Faculty of Medicine, Department of obstetrics and Gynaecology, Porto, Portugal

Abstract not available at the time of printing.

S11.4
Simulation for quality and safety in obstetrics
Timothy Draycott
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Abstract not available at the time of printing.

S12.1
Late abortion - the reasons
Sharon T Cameron
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Abstract not available at the time of printing.

S12.2
Second trimester abortion: the methods
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Abortion in the second trimester of pregnancy may be performed by medical or surgical methods. The most common method of medical abortion is induction with mifepristone and misoprostol and the most common method of surgical abortion is dilatation and evacuation. This presentation will describe the methods used, discuss the "pros and cons" of each option, and review comparative data to help providers determine which method is optimal. The evidence for these uses of feticide before medical and surgical abortion will also be presented.
Recent clinical guidance and guidelines from the World Health Organization

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The provision of safe abortion services to women who need them has the potential to drastically reduce or eliminate maternal deaths due to unsafe abortion. The World Health Organization recently updated its evidence-based guidance for safe and effective clinical practices using data from systematic reviews of the literature. As with induced abortion prior to 12 weeks, induced abortion after 12-14 weeks can be performed by either surgical or medical methods. Surgical methods include D&E, hysterotomy, and hysterectomy, although the latter two methods are rarely used given their increased morbidity and cost. Medical abortion in the second trimester can be accomplished using a variety of pharmacologic agents. When performed in the second trimester, combined use of mifepristone and misoprostol is the ideal medical regimen to effect abortion quickly and completely. However, mifepristone is not available in all settings, and alternative regimens have been evaluated. Evidence for the preferred methods of surgical and medical abortion in the second trimester which were used to inform the WHO recommendations will be evaluated.

Late abortion - the European perspective

Maarit Mentula
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This lecture is about induced abortion, i.e. termination of pregnancy (TOP). In these studies late abortion concerns TOP during second trimester (gestational weeks 13 to 24). TOP is one of the most common gynaecological procedures while 29 of 1,000 women of fertile age (15 to 44 years) worldwide and 19 of 1,000 women of fertile age in Western Europe undergo TOP annually. Most TOPs are performed before 13 weeks of gestation and only 5 to 15% later. The optimal method for second trimester TOP continues to be a matter of debate. The options are surgical dilatation and evacuation (D&E) or medical procedure using mifepristone and misoprostol. Western Europe largely uses medical TOP (MTOP) and it is the only option in Scandinavia and Finland. MTOP is related to more pain and minor adverse events, but safe D&E requires expertise. Our studies assessed the procedure of second trimester MTOP by comparing one- and two-day intervals between mifepristone and misoprostol administration. We also evaluated the adverse events of first vs. second trimester MTOP and the risk of repeat TOP after first or second trimester TOP. The studies consisted of an open randomized trial of 277 women undergoing MTOP between gestational weeks 13 to 24 and registry-based nationwide cohort studies of 18,248 and 41,750 women undergoing TOP in Finland between 2000 and 2006. Both one- and two-day intervals between mifepristone and misoprostol were found suitable for clinical use (median induction-to-abortion time 8.5 vs. 7.2 hours, p=0.038), but the two-day interval was better for women without previous vaginal deliveries (median induction-to-abortion, I-to-A time 10.1 vs. 7.6 hours, p=0.013) and those whose pregnancy exceeded 16 weeks of gestation (median I-to-A time 10.8 vs. 7.2 hours, p=0.024). However, the risk of surgical evacuation after MTOP was increased with the two-day mifepristone-misoprostol interval (OR 2.2; 95% CI 1.1-4.1), age above 24 years (OR 2.4; 95% CI 1.1-5.3), previous uterine curettage (OR 4.4; 95% CI 1.7-11.7) and fetal indication for TOP (OR 6.1; 95% CI 1.1-34.4). In comparison with first trimester MTOP second trimester MTOP was related to increased risk of surgical evacuation (adjusted OR 7.8; 95% CI 6.8-8.9) and infection (adj. OR 2.1; 95% CI 1.5-2.9). The second trimester TOP was also an independent risk factor of repeat second trimester TOP (HR 3.8; 95% CI 2.9-5.1). Thus TOP should be performed as early as possible, the indication of surgical evacuation after MTOP should be carefully considered and a proper post-abortal contraception after second trimester TOP should is highly important.
Pelvic inflammatory disease (PID) is an important cause of pelvic pain. Minimum criteria for PID diagnosis include history of pelvic pain, cervical motion tenderness, uterine tenderness, or adnexal tenderness. Since these diagnostic criteria based on history and clinical examination are nonspecific the diagnosis is usually syndromic. Additional criteria include increased oral temperature, abnormal vaginal/cervical discharge, abundant white blood cells (WBC) on bedside vaginal discharge wet mount examination, increased CRP concentration, and the presence of C. trachomatis or N. gonorrhoeae in the lower genital tract specimens. Again, these are not specific for PID. Other additional biomarkers used for PID diagnosis include serum antichlamydial antibodies (CAT) and specific tumor markers such as CA-125 and TATI. However, search for optimal biomarkers for the diagnosis of PID continues. Definitive criteria include histopathologic evidence of endometritis, tubo-ovarian abscess on pelvic imaging, and laparoscopic findings consistent with PID but such facilities are not readily available. Laparoscopy was introduced to the diagnosis of PID already in the 1960’s. 1980’s-1990’s was so called golden era of PID research when in fact clinical research proliferated. This was then followed by a period of slow progress which may still be continuing, with no major breakthroughs. Actually the research interest on PID has recently decreased. Although PID is still a major health problem in developing countries, inpatient PID is today a rare disease in developed countries. The disease burden has decreased and shifted to outpatient PID. Most cases are managed as outpatients. For instance, in Finland PID rates have decreased since the late 1990’s. A reflection of this decrease is decreasing tubal pregnancy rates and decreasing proportion of tubal infertility of all subfertility. This is in fact good news suggesting that less PID translates into better reproductive health among fertile aged women. Early clinical studies in selected outpatient clinic, emergency room clinic, or STD clinic populations showed high rates of C. trachomatis in PID. However, recent rates may be much lower. For instance, in our University Hospital only 8% of hospitalized inpatients with PID 2010 had C. trachomatis isolated from the lower genital tract. This is in line with the fact that population level C. trachomatis antibody rates have also been decreasing since 1980’s. Laparoscopy is thought to be so called gold standard for the diagnosis of PID. Multiple studies have shown that only approximately 45% to 70% of women with clinical diagnosis of PID turn out to have PID on laparoscopy. On the other hand, the observer agreement of visual laparoscopic diagnosis of PID is not necessarily reproducible. In fact intra- and interobserver reproducibilities are surprisingly low. Noninvasive evaluation for pelvic pain includes vaginal discharge wet mount examination, evaluation of endocervical discharge, CRP, CAT, transvaginal sonography (TVS), MRI or CT. Diagnostic findings consistent with PID by TVS, MRI and CT have been reported. However, all reported PID imaging studies have included relatively small numbers of patients. More research of the real-life performance of imaging tests is needed. Endometrial sampling may reveal histopathologic findings consistent with PID such as plasma cell endometritis which is a clinical-pathologic syndrome consistent with PID and pelvic pain but again, the criteria have been poorly validated. In conclusion, PID remains a major diagnostic problem and more research is needed to evaluate specific diagnostic models and to develop new diagnostic indicators or biomarkers.

STD surveillance in Eastern Europe: what is different?

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Sexually transmitted infections (STI) are a significant public health problem worldwide and a silent epidemic. The impact of STIs on women’s health is enormous: undetected and untreated infections may lead pelvic inflammatory diseases, congenital and perinatal infections, cancer and death. Prevention and control of STIs are based on 5 major strategies:

- Reproductive health education: sexual behavior, family planning, prevention of STI and unwanted pregnancies. Introduction of sex education in the schools curriculum is part of this strategy.
- Be aware of asymptomatic well as symptomatic infections
- Correctly diagnose, treat and counsel infected persons.
• Trace sex partners including diagnosing, treating and counseling
• Vaccination of risk groups / population (Hep B, HPV)

For OB/gyn specialists teenagers and young women should be especially targeted for Chlamydia, HPV and herpes infection. Pregnant women should be offered serologic screening for syphilis, HIV and hepatitis B. Microbiological testing should be offered for infections prevalent in the area.

The reported STI rates from most Eastern European countries are still significantly higher than those from Western Europe. However, in the past decade the rates have either decreased or been relatively stable. The data is limited and reflects great variation in STI surveillance, diagnosis, treatment and care services across the region. In many countries controls of STIs are still suboptimal without any reliable reporting system, the stigma exists, as well as little involvement of public health sector. The gains in STI control may be achieved through greater collaboration and harmonisation of practices at the European level.

S13.3
Prevention of mother to child transmission (MTCT) of HIV
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The aim of management of HIV infection in pregnancy is to prevent mother to child transmission (MTCT), which may occur during pregnancy, childbirth, or breastfeeding. Globally, over 11,000 children are estimated to acquire HIV infection daily during the perinatal period the vast majority of these in sub-Saharan Africa where healthcare resources and access are limited. The recent progress made in the identification of simple, effective and inexpensive antiretroviral prophylaxis regimens has been undermined by slow implementation in poor countries adding to the problem of postnatal transmission of HIV through breastfeeding. Without intervention, MTCT of HIV infection is estimated to be about 15%-25% amongst non-breastfeeding North American and Western European women and 25%-40% in breastfeeding women in resource-limited countries. However, early identification of HIV infection through routine, opt-out antenatal HIV testing, immediate assessment of HIV-infected pregnant women for their need for treatment for their own health and provision of antiretroviral treatment when needed or antiretroviral prophylaxis against MTCT has substantially reduced the risk of MTCT during pregnancy and delivery. When combined with elective Caesarean delivery and complete avoidance of breastfeeding, these interventions have reduced the risk of HIV transmission to ≤1%. Since the introduction of highly active antiretroviral agents, which suppress HIV viral load to undetectable limits HIV positive women have routinely had vaginal delivery over the last decade without increasing the risk of MTCT in the author's institution.

S14.1
Bidens * study – introduction
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* Bidens is the acronym for the six participating countries Belgium, Iceland, Denmark, Estonia, Norway, Sweden and the name of the lovely yellow flower in our logo.

Gender Based Violence (GBV) includes a broad range of related life events. The most commonly used definition is that of United Nations (UN) 'Any act of gender-based violence that result in, or is likely to result in physical, sexual or psychological harm or suffering to women, including threats of such acts, coercion or arbitrary deprivation of liberty, whether occurring in public or private life'. UN 1993 ( ) Derived from this broad definition; are different types of GBV defined by; when in life it occurred; abuse during childhood or adulthood; relationship with perpetrator; for example by intimate partner violence (IPV); and types of violence; most commonly emotional, physical and sexual. Violence and abuse are often used synonymous; however, violence may be a single act, while the term abuse implies a pattern in which act of violence lead to constant fear and other types of entrapment in the relationship. Rationale for the Bidens Study. GBV has only lately been considered relevant to antenatal care. There is an ongoing debate on how to address it, whether screening should be introduced and which interventions may work for reducing the prevalence and health consequences of violence. However, there are few studies addressing the prevalence
of different types of GBV, both occurring in childhood and adulthood and consequences for pregnancy and delivery. BIDENS study was set up to address prevalences of and consequences of GBV during pregnancy and at delivery and women were recruited at hospital and community antenatal clinics in 6 European countries.

S14.2
Prevalence of abuse in the BIDENS study - A cohort study among pregnant women
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Objectives: To assess prevalence of emotional, physical and/or sexual abuse in childhood, in adulthood and within a lifetime perspective in pregnant women across six North European countries. Further, to assess the impact of the abuse by the women's reports of suffering due to their experience. Material and Methods: Data were based on self administered questionnaires gathered among an unselected population of pregnant women throughout six European countries (Belgium, Iceland, Denmark, Estonia, Norway and Sweden). The women were recruited at hospitals and antenatal clinics. Experiences of abuse were measured by the NorAQ instrument. In all 7174 women had answered at least one item relating to experiences of abuse. Extent of suffering from the abusive experience was measured on an 11 point scale, ranging from 0 ('no suffering') to 10 ('suffering terribly'), and categorised as 'no suffering' (0), 'mildly affected' (1-5) and 'severely affected' (6-10). Results: Differences between countries were found in all categories of abuse. In a lifetime perspective between 16 - 28 % of the women had experienced emotional abuse, 10 - 31 % had experienced moderate and/or severe physical abuse, and 8 - 21 % had experienced sexual abuse. The highest prevalence of both emotional and physical abuse was found in Estonian women, who also ranked second highest as to prevalence of sexual abuse, whereas Belgian women had the lowest. Within the abused groups, 10 - 24 % (emotional abuse), 4 - 16 % (physical abuse) and 5 - 16 % (sexual abuse) were severely affected by their abusive experiences. Conclusion: A high proportion of pregnant women across six North European countries had a history of emotional, physical and/or sexual abuse. The pregnant women suffered to a great extent from their experiences.

S14.3
Abuse and mode of delivery in Bidens study
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Background: A handful of studies have suggested that a history of abuse is associated with operative delivery, in particular birth by caesarean section (CS). However, these studies had several methodological limitations such as a small and selected study sample, limitation to childhood or adult abuse only, or to certain types of abuse for example only (severe) sexual abuse. The aim of our study was to investigate the association between adult and/or childhood abuse, including emotional, physical and sexual abuse, and operative delivery in a large population based cohort of pregnant women. Material and methods: Women were recruited at hospital and community antenatal clinics in 6 European countries. Of 7200 women, 6846 gave sufficient answers on the NorAQ abuse questionnaire during pregnancy, 831 in Belgium, 597 in Iceland, 1283 in Denmark, 890 in Estonia, 2276 in Norway and 969 in Sweden. The association between different types of abuse experienced as a child and/or adult and operative delivery was estimated for both primiparous and multiparous women separately. The comparison group for all analyses consisted of women not reporting any abuse. Results: The proportion of primiparous women participating ranged from 39.1% in Iceland to 57.8% in Denmark. Among multiparous women only a history of physical abuse (as an adult and/or child) was associated with a slight increase in delivery by CS versus vaginal birth, OR 1.29 (1.03-1.63). Primiparous women with a history of emotional abuse had an increased probability of an operative delivery, crude OR 1.23 (1.02-1.48). Among primiparous women reporting sexual abuse experienced as an adult the crude OR for an operative delivery was 1.53 (1.14-2.06). This association varied across the participating countries, pointing towards an increased probability for an operative delivery in all of them even if not reaching statistical significance in each country. The association was strongest in Estonia, OR
3.34 (1.46-7.63). Conclusion: The effect of a history of abuse on mode of delivery appears to be of limited clinical importance for unselected multiparous women. For primiparous women a self-reported history of adult sexual abuse was associated with an increased probability of operative birth.

**S14.4**

**Fear of childbirth and mode of delivery in six European countries – the BIDENS* study**

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Objectives: To investigate the association between fear of childbirth and mode of delivery in six European countries. Furthermore, we explored the association of physical, emotional and/or sexual abuse and depressive symptoms with fear of childbirth. Methods: In this cohort study, pregnant women were recruited at antenatal clinics in 6 European countries from March 2008 to August 2010. A total of 7200 women completed the questionnaire, mode of delivery was reported for 6724 women. The abuse questions were based on a questionnaire developed in a previous Nordic study (NorAq). Fear of childbirth was measured through the Wijma Delivery Expectancy/Experience Questionnaire (W-DEQ). Data on mode of delivery were retrieved through hospital records. Depressive symptoms were measured by means of the 5-item Edinburgh Depression Scale (EDS). Results: Prevalence of intense fear of childbirth was 11.0% (W-DEQ score ≥85) and extreme fear 4.2% (W-DEQ score ≥100). The prevalence of intense and extreme fear of childbirth differs significantly between countries (p<0.05), 6.3% to 14.2%, and 1.9% to 6.6%, respectively. The overall prevalence of spontaneous vaginal delivery was 74.9%, vacuum extraction 8.3%, forceps delivery 0.3% and Caesarean Section (CS) 16.5%. Women with fear of childbirth (W-DEQ score ≥85) have a significantly higher chance of delivering by CS, odds ratio (OR) 1.6 (95% CI 1.4,2.0). The association between fear of childbirth and a CS, remains significant after correction for age, marital status, mother tongue and education (p<0.005, adjusted odds ratio 1.6, 95% CI 1.3, 2.0). Furthermore, women with fear of childbirth more often prefer a CS, OR 3.9 (95% CI 3.0,4.8). Fear of childbirth seems influenced by abuse and depressive symptoms (EDS score >7). Women who were physically, emotionally and/or sexually abused at any point during life and women with depressive symptoms have a significant higher chance of developing fear of childbirth, respectively OR 1.9 (95% CI 1.7,2.2) and OR 3.8 (95% CI 3.1,4.6). Conclusion: The prevalence of ‘fear of childbirth’ appears to be different in the participating countries. Women with fear of childbirth have a significant higher risk of delivering by CS. Abuse during lifetime and depressive symptoms are factors associated with fear of childbirth.

**S14.5**

**Abuse and unplanned pregnancy in Bidens study**

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Objective: To study the associations between adulthood abuse and pregnancy planning among 18-44-year-old pregnant women. Material and Methods: The data originates from Bidens study conducted in six European countries (Belgium, Iceland, Denmark, Estonia, Norway and Sweden). Pregnant women were recruited during visits to antenatal services. Of the total 7200 participants, 7125 gave sufficient answers on weather their current pregnancy was planned, 856 in Belgium, 599 in Iceland, 1288 in Denmark, 964 in Estonia, 2403 in Norway and 1015 in Sweden. Possible associations between socio-demographic variables
and unplanned pregnancy were assessed by the ?2 test in each country. Multivariate logistic regression analysis was used to examine the associations between emotional, physical or sexual abuse experience in adulthood and current pregnancy planning status. Results: The prevalence of unplanned pregnancy varied from 10 % in Belgium to26% in Iceland. Respondents who reported that their current pregnancy was unplanned also had certain socio-demographic factors traits in common. They were younger, more likely to be married/cohabiting, had a lower level of education and economic hardship compared to women with planned pregnancy in all countries. Experience of any type of violence in adulthood was significantly associated with current unplanned pregnancy. After adjustment for confounding socio-demographic factors, unplanned pregnancy was significantly associated with abuse in adulthood in Estonia (AOR 1.68; 95% CI 1.18?2.38), in Norway (1.27;1.01?1.61) and in Sweden (1.67;1.17?2.38). Conclusion: Unplanned pregnancies accounted for a notable proportion of all births in the study countries. The experience of abuse in adulthood was an important contributor to unplanned pregnancy.

S15.1
Conservative management of ovarian cancer patients
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Abstract not available at the time of printing.

S15.2
Conservative approach in cervical cancer patients and the need for centralization of a multidisciplinary management
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Every oncologist seeing reproductive-aged patients for consideration of cancer therapy must address potential treatment-related infertility. In patients with gynaecologic tumours, treatment is more or less mutilating, either by direct surgical resection of pelvic organs or by destruction of their function after chemotherapy or radiation therapy. The gynaecologic oncologist must know the techniques currently available to preserve fertility, and their indications and limits, according to the tumour type. However, according to a recent survey (driven by the ESGO) sent to all accredited Gynaecological Cancer Centres in Europe only a median of 8 patients per year per centre (less than 40 years of age, desire to retain fertility, and eligible for fertility preserving management) receive fertility sparing surgery. In the majority of patients (e.g. ovarian and endometrial cancers), fertility sparing management is more a question of the correct indication than the difficulty of the surgical technique itself, except for radical tracheectomy in patients with cervical cancer. According to recent estimates, in the developed world for each 10 million inhabitants an annual caseload of 10â€“15 patients with cervical cancer eligible for fertility sparing management can be extrapolated from epidemiologic data. Such a low prevalence of disease and low application rate as demonstrated by our survey results promote a strict referral system in order to centralize specific expertise. In such an ideal setting, those highly selected patients would be counselled and treated by well trained experts in specifically accredited centres for fertility sparing management.

S15.3
Conservative management of endometrial cancer patients
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Conservative management of young women with endometrial carcinoma has been reported by hysteroscopic resection and adjuvant use of progesterone. Local surgical excision by hysteroscopy or repeated curettage have been used for the removal of endometrial disease. The adjuvant use of progesterone depends on the tumor’s hormonal sensitivity. Optimal candidates for conservative management appear to be patients with Grade I endometrioid adenocarcinoma confined to the endometrium (FIGO Stage IA) with no evidence of LVSI, no invasion of the myometrium based on MRI findings, absence of suspicious pelvic or pararortic nodes or synchronous ovarian tumors. The patient should not have a major contraindication for medical
treatment and should have a very careful counseling since the risk of disease progression even during progestin therapy is uncertain. The patient needs to understand that this is not standard treatment. The necessity of a close follow-up should also be emphasized. During follow-up all conservatively managed patients with endometrial carcinomas should be periodically sampled by an office endometrial sampling.

S16.1
Women are designed to deliver vaginally
Gerard HA Visser
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Abstract not available at the time of printing.

S16.2
Effects on the infant
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Abstract not available at the time of printing.

S16.3
Strategies to control CS rate
Michael Robson
National Maternity Hospital, Dublin, Ireland

Abstract not available at the time of printing.

S17.1
Safety culture in the labour ward
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Karolinska University Hospital, Department of Women and Child Health, Stockholm, Sweden

Abstract not available at the time of printing.

S17.2
Human factors affecting CTG interpretation
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Wide observer disagreement exists over CTG interpretation, particularly in the evaluation of variability, decelerations, and overall tracing classification. The reasons behind this are still incompletely understood, but poor reproducibility can have a profound impact on the technology's accuracy and on its efficacy. Some scientific societies have recently revised their guidelines for CTG interpretation, but no up-to-date universally accepted recommendation exists. In spite of some approximation between the major guideline sets, important differences still exist between them, and they remain complex and prone to memory decay. Regular training in CTG interpretation appears to result in increased knowledge, better observer agreement, and improved quality of care. Computer analysis has also been developed, but remains heavily dependent on staff to confirm interpretation and to decide clinical management. An international consensus, comprising simpler and more objective interpretation guidelines, together with regular staff training, and improved decision support systems seem to be the way forward for this technology.

S17.3
Use of fetal CTG+ST analysis and labour outcomes
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Abstract not available at the time of printing.
Adverse outcome that can be avoided by intrapartum monitoring

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Continuous electronic fetal monitoring is recommended for the intrapartum care of the ‘high risk’ pregnancy arising from the antenatal period or during labour. In certain intrapartum situations including maternal fever, chorioamnionitis, underlying fetal diabetes, or fetal stroke, conventional monitoring tools have not been shown to reliably predict fetal injury. This is because current intrapartum monitoring tools including CTG, FBS, STAN and fetal pulse oximeter usually target fetal injury operating via the hypoxia pathway and are insensitive in detecting fetal injury mediated via non hypoxia or inflammatory pathway. Intrauterine infection exerts direct inflammatory fetal injury and also sensitises fetal neurologic tissue to synergistic injury even by modest degrees of intrapartum hypoxia although the timing of onset and the subset of predisposed fetuses remain unknown. If intrauterine infection is suspected or established the clinician should lower their threshold for intervention and also avoid exposing the fetus to further hypoxia, for example by prolonged of excessive use of oxytocin or difficult or traumatic instrumental delivery. The present author focuses on those adverse perinatal outcomes that can be prevented by current monitoring tools.

Is bacterial vaginosis a sexually transmitted disease?

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Herman Gardner was since 1955 convinced, that ‘Haemophilus vaginalis - vaginitis’ is a sexually transmitted disease. It is since 1984 defined as ‘a replacement of the lactobacilli of the vagina accompanied by changed properties of the vaginal fluid’. About two thirds of the patients suffer from recurrences after some months instead of correct treatment with metronidazole or clindamycin. We have found by fluorescence in situ hybridisation a bacterial biofilm adherent at the vaginal wall, up to 90% consistent of Gardnerella vaginalis and Atopobium vaginae, which could not be destroyed by metronidazole although pH, wet mount and symptoms were normalised. Moreover, this typical biofilm was seen on epithelial cells in the urine of women and their sexual partners, but not of others or children, and in some cases in cryopreserved donor semen (Swidsinski et al. 2005, 2008, 2010a, 2010b). It is not yet understood, why and how this biofilm arises, which role BV - associated bacteria and lactobacilli play and how the biofilm can be cracked to prevent recurrences. We propose instead of Gardnerella vaginals the name Gardnerella genitalis and instead of bacterial vaginosis the name Gardnerellosis.

Molecular characterization of the human vaginal microbiota

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It is now recognized that the vaginal microbiota along with intrinsic host factors play a major role in maintaining the vaginal health of women. We have hypothesized that differences in the species composition of vaginal bacterial communities in health may affect the level of community dynamics, hence the risk of developing bacterial vaginosis or acquiring communicable diseases. We have analyzed the composition and structure of the resident bacterial community in 400 healthy women in four ethnic groups in North America and evaluated the level of community dynamics in 33 women sampled twice weekly for 16 weeks using pyrosequencing of barcoded 16S rRNA genes. Statistical analyses revealed five dominant community states types; four of which had significant proportions of Lactobacillus species. We have developed novel quantitative measure of community stability that incorporates three aspects of stability: constancy, resilience and persistence over time. This index was applied to identify five major classes of temporal community dynamics. Time during the menstrual cycle appears to affect the level of stability within a women, and as expected menses is associated with decreased stability and increased transitional events, but these effects were mitigated by community composition. A few communities experienced a lack of major transitional
events, and those were often associated with *Lactobacillus crispatus*, *L. gasseri* dominance and surprisingly, to a lesser extent, with communities lacking significant number of *Lactobacillus* sp. Communities classes dominated by *L. iners* demonstrated either a lack of stability or a remarkable level of stability, certainly indicative of genomic diversity within *L. iners* strains. This work forms the basis of the development of mathematical models of vaginal community dynamics and suggests that longitudinal evaluation of the vaginal microbiota could form the basis to personalized treatments and evaluation of the risks to adverse outcomes. Further, the results demonstrate the peril that accompanies the efforts to interpret data from cross sectional studies designed to link vaginal bacterial community composition to disease risk.

**S18.3**

**Impact of probiotics on the vaginal flora.**

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The vaginal microbiota is a complex structure that can change quickly and dramatically, and significantly impact a woman's health. Vaginal infections are extremely common, and there is no evidence of a reduction in their incidence. Treatment and preventive strategies have been relatively unchanged for several decades. Probiotics are microorganisms that provide a health benefit to the host and are promoted as alternatives for the treatment and prevention of infectious diseases and other conditions. One of the most rapidly developing areas of probiotic research is in the management of vaginally acquired infections. The ability of lactobacilli probiotic interventions to prevent, treat and improve the cure of these infections has long been considered and is now supported by some clinical evidence. There are multiple mechanisms by which probiotic lactobacilli can prevent infection. Several *Lactobacillus* species produce compounds that kill or inhibit the growth of vaginal pathogens. Other lactobacilli reduce the adherence of pathogens. However, the prerequisite is the ability of the given probiotic strain to colonize vaginal epithelium. Unfortunately, only in a few trials the presence of the applied lactobacilli in vagina during the observation period was proved by colonization studies. Protocols of the clinical studies were based on short- or long-term application of preparations regardless of menstrual cycles of the studied women. It is known from microbiological observations that vaginal microbiota is subject to great quantitative changes during and after menstruation. Our in vitro studies have shown that higher estrogen levels increase adherence of the vaginal *Lactobacillus* to vaginal epithelium while those of progesterone negatively influence these interactions. Successful colonization of the vaginal epithelium in vitro prevented its subsequent colonization with vaginal pathogens. Thus, physiological hormonal changes may be a factor which probably strongly influences efficacy of vaginal probiotics used to treat or prevent bacterial vaginosis in women at reproductive age. A critical analysis of already published clinical trials with respect to the above mentioned variables will be made in this presentation.

**S18.4**

**Vaginitis, abnormal vaginal flora and pregnancy outcome**

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Abstract not available at the time of printing.
S19.1
Hysteroscopic approach to Sterilisation- should we abandon laparoscopic approach
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Abstract not available at the time of printing.

S19.2
Long acting hormonal contraceptives - should we abandon sterilisations now??
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Abstract not available at the time of printing.

S19.3
Adolescent cervical stenosis following the use of Depo-Provera
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Objective: Case report debating the use of Depo provera in adolescence as a cause of cervical stenosis and haematometra. Materials and Methods: Case managed in inpatient setting. Extensive Medline data base search used when writing the discussion part. Results: A 17 year old virgo-intacta was referred by her general practitioner (GP), with a 3 year history of sudden flooding and dysmenorrhea. She had been placed on Depo provera because of a history of menorrhagia. The pelvic ultrasound scan was suggestive of haematometra. She was admitted for an examination under anaesthesia, drainage of the uterine contents and insertion of a coil. At surgery, she was found to have an intact hymen, which was not imperforate, the cervical os was stenotic and had to be dilated. 300mls of old, altered blood was aspirated and a Nova T 380 coil was left in-situ. The patient was then placed on Qlaira to aid re-growth of the endometrial lining. After being on Qlaira for 3 months, she was symptom free, having regular withdrawal bleeds and a scan confirmed normal appearance of the uterus. Conclusions: Cervical stenosis could be secondary to periodic injections of Depo-provera. There is some evidence that cervical stenosis occurs mainly in hypo estrogenic states such as reproductive age group women with oligomenorrhoea or amenorrhea. In hindsight it appears the symptoms of haematometra were exacerbated by the Depo provera use, as stopping the medication rendered a quick resolution in the patient’s symptoms.

S19.4
Intraperitoneal Levonorgestrel-releasing intrauterine device maintaining its contraceptive effect: a case report
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The aim of this study is to report a case, in which Mirena was possibly perforated during insertion, sunk into the free edge of omentum, moving freely in the abdomen but still maintaining its contraceptive effect. A 36-year-old patient applied to our clinic with the complaint of metrorrhagia. The patient who had given her births through Caesarean had Mirena inserted 23 months ago. Transvaginal ultrasonography revealed no signs of IUD in the uterine cavity. Upright abdominal radiography showed that IUD was superposed above the upper part of sacrum superior. Laparoscopy was applied to the patient. IUD was not detected in the abdomen. Scopic abdominal investigation was performed during operation and IUD could not be detected. During the computerized tomography taken after the first session, it was seen that IUD was located 3-4 cm above umbilicus, in the transverse meso. Next day, laparoscopy was applied to the patient for the second time. It was recognized that the device had sunk into the omentum. IUD was removed and the procedure was completed. In our case the contraceptive effect by mirena continued even when the local mechanisms were
totally eliminated. This led us to the assumption that contraception might still have been provided due to the systemic effect of the progestagen released.

**S19.5**

The effect of oral contraceptive pills on plasma lipid peroxidation

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Background: Among the non-surgical methods of preventing conception, taking oral contraceptive pills (OCP) is the most common way among women of 15-44 years old. The one stage contraceptive pills include LD and HD contains estrogen and progesterone. Some studies have shown some effect of these tablets in making oxidative stress. In this study, lipid peroxidation in ocp and non-hormonal method users have been investigated. Methods: In this study, 80 women consuming pills (OCPs) to prevent pregnancy and 38 women using non-hormonal method as a user group was selected and plasma Malondialdehyde (MDA) as an indicator of lipid peroxidation was measured. Results: MDA level was increased in OCP compared with control group significantly (p=0.001). Conclusion: we can conclude from this study that ocp should use with an antioxidant.

Key Words: oral contraceptive pills, lipid peroxidation, Malondialdehyde.

**S19.6**

Uterine and ovarian size and structure for long time Levonorgestrel releasing intrauterine system users

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Objectives: To identify uterine and ovarian sizes when inserting the LNG IUS and during use. To clarify potential LNG IUS effects on the uterine and ovarian size and structure of LNG IUS users. Methods: Patients who had LNG IUS inserted at November 01, 1998 to January 31, 2011 at the I.Vasaraudze’s Private Clinic Ltd. were invited to participate in the study. Depending on the entry indications, patients were divided into 2 groups: the contraception and the therapy group. All the patients had undergone transvaginal uterine and ovarian ultrasonography. The ovarian and uterine volume was calculated by the formula of \(0.523 \times L \times W \times H\). Results: In contraceptive group when inserting the LNG IUS average uterine volume was 108.23 cm\(^3\), at final visit 78.66 cm\(^3\). In therapy group when inserting 62.19 cm\(^3\), at last visit 53.41 cm\(^3\). The average ovarian size when using LNG IUS was statistically unchanged. The therapy group had a statistically significantly higher ovarian size after 10 years of LNG IUS use. Conclusions: women in contraceptive group are significantly younger, the uterine volume in group increases slightly. Using the LNG IUS for 5 years or longer does not protect against uterine myoma formation. Women in the treatment group are significantly older and have a higher uterine volume when inserting and when using LNG IUS. The uterine volume decreases by 25% on average, which can be explained by the disappearance of endometrial hyperplasia and adenomyosis therapy.

**S19.7**

Perceptions and practices on contraceptive methods among medical professionals in Latvia

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Introduction: The abortion rate in Latvia is still high and usage of the highly effective contraceptive methods is still low by sexually active women. Medical professionals can affect women/public opinion and choice regarding contraception. Aim: To investigate knowledge and practice on contraceptive methods among Latvian medical professionals by prospective, cross-sectional survey. Materials and methods: The structured anonymous questionnaire was distributed during the professional lectures and meetings during March-
December, 2010. 708 participants: obstetrician – gynecologists, family doctors and pharmacists were involved. Statistical analysis was done with the MS Excel 2007, SPSS 19, CIA softwares. Results: The response rate was 42.9%. 93.5% gynecologists, 21.5% family doctors and 29.5% pharmacists reported that consult more than 5 women per month. Gynecologists offered wider contraceptive methods choice than other health care providers. 58.8% pharmacists provided an emergency contraception consultation. 62.7% professionals most frequent offered COC. 25.2% gynecologists responded incorrectly that spermicide could prevent STIs. 15% gynecologists, 21.5% family doctors and 23.5% pharmacists believed that sterilization was not reversible contraceptive method. There were some gaps in professionals’ knowledge regarding combined hormonal contraception choice limitations in the clinical situations and interaction with other medications. 91.7% of responders agreed that they would like to improve their professional skills. Conclusion: Although gynecologists in Latvia are more experienced and skilled in contraception counseling than family doctors and pharmacists according to study results, we could identify the needs to improve all professionals’ knowledge about reliable contraceptive methods.

Key-words: Contraception, Practice, Knowledge, Gynecologists, Family doctors, Pharmacists

S20.1
The gynecologist as a counsellor?!!
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Beyond diagnosing and treating diseases present day's gynecologists' and obstetricians' tasks consist more and more of preventive measures (contraception, early diagnosis of cervical and breast cancer, pregnancy care), the support in decision making processes (prenatal diagnostics, cesarean section on demand, hormonal replacement therapy) and crisis and supportive interventions (infertility, unwanted pregnancy, intrauterine and perinatal death, diagnosis of cancer). Due to these changes a high degree of communicative competence is mandatory not only to satisfy the patients' needs but also to enhance the physicians' satisfaction with their job. The adequate counseling strategy in the given context is a patient-centered approach. This approach consists of communicative skills aiming at attending, following and reflecting the patient in a physician-patient dialogue. These skills will be demonstrated by means of examples and cases and the limitations of their application discussed. In addition to these basic skills more specific skills that facilitate the difficult tasks of breaking bad news and communicating risk in the context of shared decision making will be demonstrated. This communicative toolbox should in our opinion be part of the training in obstetrics and gynecology.

S20.2
Patients with unexplained physical symptoms
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Introduction: Patients complaining about physical symptoms which cannot be explained by physical findings present a diagnostic and therapeutic challenge to gynecologists and obstetricians. Frequently an unstructured step by step approach is applied (first excluding urogynecological or other diseases and then referral to a psychiatrist) which leads often to frustration for the patient and the physician. Method: Review of the literature and analysis of 30 referred cases to the Division of Psychosomatic Obstetrics and Gynecology of the Department of Obstetrics and Gynecology University Hospital Basel.- Development of a structured approach. Results: Patientsin with unexplained physical symptoms are classified are suffering from somatoform disorders. In gynecology these patients present mainly with chronic pelvic pain, vulvodynia, urinary urgency, unexplained infertility. Empirical studies show that an integrated multidisciplinary approach with involvement of the patient in developing a shared model of understanding the symptoms and a process of shared decision making with respect to therapeutic strategies seem to lead to the highest degree of symptom amelioration and quality of life of patients. This approach will be demonstrated and exemplified by case histories.
How to meet the emotional needs of breast cancer patients

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Introduction: Breast cancer has a huge impact on the physical, mental and sexual health of the patients. Sophisticated and advanced treatment protocols and early detection of disease have improved the prognosis of the disease and increased the number of survivors. Helping to live with the disease becomes a central issue of care. Methods: Applying principles of psychoncological and sexological care to the holistic care for patients with breast cancer. Results: Along the whole process of diagnosis, early treatment, long term follow up survivors have to cope with the threat of the disease, with anxiety and depressive episodes, with possible changes in body image and body function, with changes in relationship and family interaction and changes in intimate and sexual function. These patients need therefore a professional partner to help them cope with the stress of these changes by offering information, education and supportive psychotherapy which includeds elements of cognitive behavioral, psychodynamic and systemic therapy. A model of care will be presented as a case history.

Demographic and social aspects

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Abstract not available at the time of printing.

Pregnancy in women of 40+ years

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Maternal age over 40 years: a risk factor for adverse pregnancy outcome

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Abstract not available at the time of printing.

Therapeutic approaches

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Abstract not available at the time of printing.

Monitoring reproductive health; method problems to consider and lessons learned

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Any monitoring program must have purpose, an action plan, and a quality control system. Collection of indicators needs to be inexpensive and simple - indicators need not have perfect sensitivity and specificity, but sensitivity and specificity need to comparable over time or between populations depending on what they
intend to monitor. Directed Acyclic Graphs (DAGs) may be useful in identification of action points in monitoring and will spot problems in some indicators related to specific values of intermediates in the causal process. Lack of valid indicators for, e.g., fecundity, may lead to grossly misleading interpretations using data not collected for monitoring purposes. Use of indicators with low specificity may lead to unnecessary actions, especially if the condition they aim to measure is rare. Reprostat identified a number of indicators that do give a crude overview of some aspects of reproductive health in Europe, but the group also showed a lack of comparable indicators, especially concerning softer quality of life indicators. Data on such health needs to be collected in standardized and validated surveys using modern techniques in data collection.

S22.2
Reproductive health monitoring and statistics in Europe. REPROSTAT project
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Good health information system is the backbone of effective, evidence-based public health policy-making. A useful health information system integrates health data from various sources, registers, statistical information systems and regularly collected surveys. The availability of representative population-based health data is a prerequisite for identifying public health problems at community level. The systematic collection of information on reproductive and sexual health, however, is lacking in Europe. The EU Health Programme has funded three projects on reproductive health information in 2001-2011. In these REPROSTAT projects, a set of indicators for monitoring and describing reproductive health in the EU was developed. A review of existing recommendations on reproductive health indicators was done, a set of initial indicators in consultation with representatives from relevant outside agencies and organisations was proposed, and 200 reproductive health experts throughout Europe was invited to review the indicators. The feasibility of REPROSTAT indicators was tested first in two (2006) and then in eight countries (2008). In addition, a report on the state of reproductive health and fertility in Europe was published in 2011. Its main themes were teenage sexual and reproductive health, childbearing policies, contraception, assisted reproductive technologies and induced abortion. The main reproductive health indicators are included in the ECHI (European Community Health Indicators) monitoring system. Its general objective is to consolidate and expand this public health indicator system towards a sustainable health monitoring system in Europe, including the collection and dissemination of comparable health data and information. This will be done in close collaboration with Member States, the European Commission, Eurostat, WHO, OECD and other international organisations. Currently, however, the system is not functioning yet in Europe. Of the 15 core indicators, 2 recommended indicators and 1 indicator for development, proposed by REPROSTAT, only seven are available in the existing international health data bases, even though some of the collected indicators do not follow the recommendation. The availability of indicators taken from surveys is poor. Some data regarding teens aged 15 years can be taken from the WHO Health Behaviour among School-Children. The 2014 European Health Interview Survey (EHIS) will not contain the proposed reproductive health indicators.

S22.3
Teenage pregnancies in the European Union in the context of sexual health services and sexuality education
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Abstract not available at the time of printing.

S23.1
Do we need 3D anatomy?
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Abstract not available at the time of printing.
Over the decades more than 100 surgical techniques have been developed to correct pelvic floor disorders from both the abdominal and vaginal approach. Too often, the choice of procedure and route of approach has been based on the surgeon's biases rather than on anatomic principles. Improved understanding of normal and abnormal pelvic anatomy and function and the many factors contributing to disorders like incontinence or prolapse now permit a more rational selection of procedure and route based on what is best for the individual patient. The pelvic floor is one unit and surgery in one compartment can adversely affect function and anatomy in another. Sacrocolpopexy or sacrospinous fixation may precipitate cystocele and/or urethral sphincter incompetence, colposuspension may initiate or cause a rectoenterocele to enlarge. Since the development of the 'tension-free tape' concept alloplastic materials have run down all other procedures with far more than 3 million tapes and meshes having been inserted. The enthusiasm about the high success rates has been slowed down in recent years by complication rates apparently underestimated and complications not anticipated. The aim of urogyaecological surgery should be the improvement of symptoms bothering and reducing the quality of life of our patient, not fulfilling our aesthetic view, how a vagina or a pelvic floor should look like. The choice of surgery is influenced by clinical features, physical fitness and expectations and has to be individualized, bearing in mind the likelihood of side-effects. We should not treat urodynamic parameters, pad-weigh-tests, measurements in the POPQ, but, rather symptoms and complaints of our patients. Age, Quality of tissue, signs of urogenital aging, chronic bronchitis (nicotine abuse), obesity, diabetes mellitus, spondylolisthesis, lumbar spinal stenosis and the willingness and acceptance of possible restrictions in everyday life are the decisive parameters when selecting from a wide variety of surgical procedures either abdominal or vaginal, with or without use of alloplastic materials. The major limitation in the decision making of an adequate surgery may be the lack or loss of anatomical and surgical skills and, for many medical and paramedical reasons, the lack of experience.

Traditionally pelvic floor reconstructive surgery is performed either transvaginally or transabdominally. Minimally invasive procedures for urinary incontinence and pelvic organ prolapse have gained increasing popularity in the past decades. The laparoscopic approach has been proposed with a view of combining the high efficacy of the transabdominal approach with the minimal invasiveness of the transvaginal technique. Laparoscopic colposuspension was first described in the early 90s as the minimal invasive alternative of the open Burch procedure. The initial enthusiasm was faded after the introduction of tension free tapes. Several studies suggest a lower success rate, longer operating time and a longer learning curve for the laparoscopic. Burch compared to the tension free tapes. Probably the only indication of entering the Retzius laparoscopically is to repair existing paravaginal defects or cases where the use of a graft is contraindicated. Transabdominal sacrocolpopexy is considered the 'gold standard' for the surgical treatment of the middle compartment prolapse. However, it is associated with increased morbidity compared with vaginal repairs. The laparoscopic sacrocolpopexy reproduces the abdominal procedure following the same principles and using similar materials. One or two meshes preferably nonabsorbable are used to suspend the vault or the cervix (in case of subtotal hysterectomy) from the sacral promontory or the anterior aspect of the sacrum. When the uterus must be preserved a hysteropexy can be performed. The technique demands advanced surgical skills especially in suturing and cannot be suitable for all patients. Staplers have also been used and make the procedure easier. Initial retrospective and some prospective studies have shown high efficacy in experienced operators with a low complication rate, but prospective studies are limited. Comparative studies are needed in order to assess its superiority compared to the newest tranvaginal methods using grafts. The advantages of minimal access through laparoscopic and vaginal routes include smaller incisions, shortened hospital stay, decreased analgesia, rapid recovery and rapid return to work.
There remains considerable anxiety and concern regarding standards of care in Europe. Published evidence suggests that there is considerable variation in clinical care which is provided across the Member States of the EU. Peristat Report has clearly demonstrated huge variation in various parameters such as induction of labour, caesarean section rates, maternal morbidity and mortality and even the survival figures for pre-term infants. All these parameters reflect that there is a different way of managing obstetric challenges in the 27 Member States of the EU. Variation in standards of care not only have a direct bearing on the care which is provided to women but also has a major implication for postgraduate training across Europe, as variable standards of care would ultimately lead to lack of standardisation for training and this indirectly will reflect on how future generations of obstetricians and gynaecologists would practise across Europe. Therefore the European Board and College of Obstetrics and Gynaecology have embarked on an ambitious plan to develop documents relating to developing unifying standards of care across the Member States of the EU. A working party was established in November 2010 and its first document has been approved by its Council in November 2011, describing 15 core standards for obstetric and neonatal services, supporting a set of standards for postgraduate training as well. This development would also lead to harmonisation of training across all the member states. This presentation will focus on how this variation in outcome and process...
measures in obstetrics care can be addressed in order to harmonise the standard of care across Europe, which will directly benefit all women of the European Union. Furthermore, once standardised healthcare approach has been adopted, it will facilitate postgraduate training across Europe and will also help to quality assure not only training units but indeed clinical services.

S25.4
Certification of practical skills in laparoscopic surgery ’ The European model'
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Abstract not available at the time of printing.

S25.5
e-learning
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Abstract not available at the time of printing.

S25.6
Professional development
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Objectives. Medical professionalism should and can be taught and evaluated. Introduction. Profession is occupation whose core element is work based upon the mastery of complex body of knowledge and skills used. It is a vocation in the service of others. Its members are governed by codes of ethics, committed to competence, integrity and morality, altruism and promotion of public good. These commitments form the basis of a social contract between a profession and society, which in return grants the profession a monopoly over the use of its knowledge base, the right to considerable autonomy in practice and the privilege of self-regulation. Professions and their members are accountable to those served, to the profession, and to the society.1. Methods. We try to stay updated about advancement of science and technology, we learn theory and train skills. Just as well, medical professionalism should be taught and evaluated; this is already the case at medical schools and during training programs. Training the trainers and self-reflection courses are some of the first steps to get insight and start thinking of generic competencies. Results and conclusions. With changes in society, technology and business world, professionalism should be taught explicitly and continuously if medicine is to remain what it should be: knowledge and skills used in the service of others. 1Crueess SR, Johnston S, Cruess RL. Profession: a working definition for medical educators. Teach Learn Med 2004;16:74-6.
The target of all SUI operations is reconstruction of anatomy and restitution of function. Historical development: 1) late 19th century - vaginal repair was due to unsatisfactory long term results in the past century replaced by 2) 1965 - colposuspension- Burch worked out hammacca support for urethro-vesical junction from strong and elastic vaginal wall with excellent results exceeding 90 %. The new tension free tape methods showed the same good results. 3) 1998 - Tension free Vaginal Tape. New concept of Ulmsten and Petros concentrates on replacement of incompetent pubourethral ligaments. With extensive deployment of retropubic tapes serious complications as large vessels or bowel injuries were reported. This fact inspired Delormeto propose a novel trajectory- 4) 2003 - Transobturator Tape = out - in. His method avoided hazardous regions but required substantial dissection of urethrovaginal space. Thus de Leval turned over the direction of newly developed tool the direction of introduction and presented 5) 2004 - TVT - O = in - out. His development maintained excellent results of former techniques and reduced further the complication risks. Last step in this never ending effort to extend the spectrum of SUI operations is 6) 2009- single incision sling which shows promising results and is now the subject of several comparative studies. All methods mentioned will be presented in short videos and commented by the surgeon.
FC01.01
Vaginal ovarian cystectomy revisited - a pilot case control study to assess outcomes
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Introduction: Although the laparoscopic route is the gold standard for the removal of benign ovarian cysts, the primary vaginal approach has many advantages including absence of incisions and lower pain scores. The aim of this prospective study was to compare outcomes of women undergoing primary vaginal and laparoscopic approaches for the removal of benign ovarian cysts. Methods: Patient data from operative and anaesthesia records from 6 women who underwent vaginal ovarian cystectomies via posterior colpotomy were compared to 7 women who had a 3 port laparoscopic ovarian cystectomy. Inclusion criteria included vaginal mobility and normal tumour markers and non-suspicious ovarian morphology and Doppler venous flow on ultrasonography. Results: The median diameter of cyst removed vaginally was statistically similar to that removed laparoscopically (5.6 vs 6.3 cms; p<0.05). Vaginal ovarian cystectomies took longer to perform (median 79 vs 70 mins) and stayed 1.6 hours longer (median 10.1 vs 8.5hrs, p>0.05), although these parameters are improving with increasing experience. None of the study group had complications whereas two laparoscopic patient suffered complications: a small bowel obstruction at one of the port sites requiring surgery and post operative umbilical scar infection. The laparoscopic group took twice as long to return to work (vaginal median 14.3 vs 28.3 days). The patients who underwent vaginal cystectomies also reported a lower pain score (4.3/10 vs 6.5/10) and higher patient satisfaction score (9/10 vs 7/10) compared to the laparoscopic group. Discussion: Vaginal ovarian cystectomies were less painful, more cosmetic and had better outcomes and patient satisfaction scores.

FC01.02
Osteoporosis, HRT, breast cancer and wrong evidence-based medicine
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Aim: Searching for new answers in the link between breast cancer, osteoporosis and targeted breast cancer drugs. Method: We have performed a bibliography review in a worldwide basis and from our own experience. Results: The breast cancer aetiology is not known, but its risk is increasing with age. Estrogens and medroxyprogesterone was linked to. Breast cancer risk is strongly related to age, with 81% of cases occurring in women aged 50 years and over. Breast cancer is the most common cancer in women. The lifetime risk of developing breast cancer is 1 in 8 for women. Risk factors associated with the disease could be viruses, environmental factors or others acting on breast cell. Women in developed countries are at increased risk of breast cancer compared with women from less developed countries. This variation can be explained by the fact that women in developed countries have fewer children on average and a limited duration of breast feeding, it is said. But in reality reproductive factors that influence breast cancer risk do not explain it. Postmenopausal osteoporosis usually affects women over the age of 60. The leading cause of osteoporosis is a lack of estrogens in women and opposite drugs. Osteoporosis, affects 1 in 2 women, is now three times more common that breast cancer. The cell cycle consists of four phases. DNA and RNA viruses have been shown to be able to cause cancer and referred to as carcinogens. Conclusions: The natural lack of estrogen does not decrease breast cancer incidence.
Vilnius City women's knowledge about cervical cancer risk factors and screening programme

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Objectives are to survey awareness of women about the risk factors of cervical cancer, to find out if it encourages women to see gynecologist more often, to take participation in the screening program, be interested about vaccination. Material and methods. Participants of the survey were 1825 women aged 18–60, residing in Vilnius, who voluntarily agreed to fill in the self administrative questionnaire. Results. 46.6% of women acknowledged the papillomavirus as the main risk factor of the cervical cancer. Women who recognized papillomavirus as a main risk factor were better aware of the national screening program, especially at the age before 25 (OR=1.79; 95 % CI 1.36–2.36). Women of this age group acknowledged to undertake the Pap smear after the first sexual intercourse (OR=1.50; 95 % CI 1.17–1.93) and recognized to perform it on a regular basis (OR=1.51; 95 % CI 1.18–1.95). Majority of women expressed will to take vaccination if it would be compensated by the state (OR=1.36; 95 % CI 1.04–1.78). Conclusions. Knowledge about human papillomavirus as a main risk factor of cervical cancer among Vilnius city woman is not sufficient. Knowledge about HPV does not encourage woman to visit gynecologists. Woman who know HPV to be a risk factor are willing to visit gynecologist regularly as recommended by the prevention program. Most of woman who visit gynecologist rarely are willing to take vaccination. It might show that the woman overestimate the importance of a vaccines and of the regular screening for the prevention of cervical cancer.

The effect of black seed (Nigella sativa) extract on gonadotropin, estrogen, Progesterone and folliculogenesis in mice

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Background and Aim: The black seed a member of the family of Ranunculaceae, have been employed as a spice and curative remedy for numerous disorder. This research with regard to the role of the treatment plant infertility study has been designed. Material and Methods: Five groups of mice were selected. All of mice received Cloprostenol, after three days plus Progesterone, for synchronization. Placebo group received normal saline, and three experimental groups received IP injection of 50,100,200mg/kg/2day extract for 20 days. After 10 injection, blood samples were taken from all groups, hormonal measurement, including LH, FSH, estrogen, progesterone were performed by RIA technique. The results are analyzed in signification level about %95 by SPSS software. The important parameter in this research included: The ovarian weight changes, probably histological changes in ovaries, change in number of Corpus Luteum and follicle, density of level of FSH, LH, Estrogen and Progesterone. Results: Results showed significance decrease in the level of FSH, LH also significance increase the level of estrogen in all groups, while the level of progesterone in the experimental group 2. Experimental group 3 had a significant increase weight of ovaries. Number of follicles significance increase in the experimental group 3. Also significance increases the number of yellow body in experimental group 2. Conclusion: The hydro-alcoholic extract of Nigella sativa may enhance the number of follicle and yellow body that indicated it increase fertility in female mice.

Key words: Nigella sativa, Gonadotropin, Estrogen, Progesterone, folliculogenesis, mice.
Midwife assisted delivery practitioner; retrospective study of safety
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Objectives: It may be hypothesised that a midwives’ experience of normal childbirth enhances her ability to mimic spontaneous birth during operative vaginal deliveries (OVDs). Our aim was to compare the safety-related outcomes of midwife-performed OVDs with those performed by doctors. Materials and Methods: The maternity data management system was used to identify cases in Aberdeen between June 2005 and June 2010. Those delivered by midwives formed the exposed cohort. Obstetric outcomes were initially compared with those performed by any doctor, and in a secondary analysis, with those by junior doctors (ST3 to ST5 or equivalent) only. Fisher’s exact test, backward logistic regression analysis and independent sample T-tests were used in the statistical analyses where appropriate. Results: Of 2540 women, 330 were delivered by midwives and 2210 by doctors, of whom 1049 were by junior doctors. Patient characteristics were comparable in each group. Women were no more likely to obtain a 3rd or 4th degree tear when their delivery was performed by a midwife than those performed by a doctor (adj OR 0.6 95% C.I 0.3-1.2), or junior doctors specifically (adj OR 0.6 95% C.I 0.3-1.2). Mean blood loss was significantly less when compared with all doctors (mean difference -57ml p=0.03.), but no significant difference was found when compared with junior doctors (mean difference -43ml p=0.1). Conclusion: Once adjusted for mode of delivery, extended perineal injury and mean blood loss were similar in each group. Midwives were significantly less likely to use forceps as their instrument of choice.

Ectopic intrauterine device in abdominal cavity detected in a pregnant women - surgical removal by laparoscopic: a case report
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Introduction: Intrauterine contraceptive device (IUD) is a safe and effective method of contraception, widely used all over the world, for more than three decades. A potential but infrequent complication of intrauterine device (IUD) insertion is perforation of the uterine wall into the pelvic or abdominal cavity or into adjacent organs, with reported incidence of 0.5-1/1000 insertions. We present an interesting and successful case of ectopic IUD in the abdominal cavity diagnosed and surgically removed by laparoscopy in pregnant woman. Case report: A 31-year-old woman, grvida 3 parity 2, was admitted in our department with complaints of amenorrhea lasting 14 weeks and positive pregnancy test. A cooper intrauterine device had been inserted into the uterine cavity in her last period. On gynecologic examination, the IUD strings were not visible, and on transvaginal ultrasonography the IUD appeared to be in the abdominal cavity, in retro uterine position. This location was later confirmed by magnetic resonance imaging (MRI). A gestational sac with a fetus of 14 weeks was also detected. We proceed to surgical laparoscopic removal of the IUD, at 18 weeks of gestation, uneventful. The pregnancy was complicated by gestational diabetes, with no other complications. Culminates with a birth at 39 weeks of a female newborn with 2700g weight and apparently healthy. Discussion: Laparoscopic abdominal operations can be safely conducted in pregnant patients. A strong support structure must be in place in advance to deal with potential complications, and the surgeon must be skilled in laparoscopic techniques and in surgical obstetrics.
Quality of life (QOL) and related factors among Iranian cervical cancer survivors
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Objectives: To evaluate the quality of life (QOL) among Iranian cervical cancer survivors and its relationships with demographic and disease related factors. Methods: A descriptive correlational study was carried out on 65 consecutive cervical cancer survivors in three different oncology centers related to Shahid Beheshti University of Medical Sciences, Tehran. The QOL was evaluated using three different standard questionnaires: 1) EORTC QLQ-C30 for patients with malignant tumors; 2) EORTC QLQ-CX24 for cervical cancer patients; and 3) SSQ for assessing the social support. The data was obtained by telephone interviews. The test-retest reliability and internal consistency of the scales were examined. Cronbach’s alpha was calculated to assess internal consistency among items. Content validity was assessed to review the scales. Results: Cervical cancer survivors stated a good QOL. However, its score was negatively associated with physical functioning as well as symptoms including short breathing, lack of appetite, constipation, and menopausal symptoms. Also, there was a positive association between QOL and economic conditions as well as QOL and emotional functioning. Conclusion: Although, the QOL in cervical cancer survivors was good, enhancement in physical well-being and treatment related symptoms can influence the QOL and improve the care of these patients. Keywords: Cervical Neoplasm, Quality of Life, Questionnaires.

Comparing the effects of ginger and metoclopramid on the treatment of pregnancy nausea
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Objectives: Ginger can reduce nausea and vomiting. There is no study comparing the effects of using ginger and metoclopramid on treatment of pregnancy nausea. This study assesses the effects of ginger on nausea and vomiting caused by pregnancy, and compares it with metoclopramid medicine. Materials and Methods: This study was a randomized double-blind controlled trial. Metoclopramid, Ginger and placebo were putted in similar capsules. The medicines were administered three times a day. Then the Rhodes questionnaire was completed and its score were calculated. Data were analyzed by Chi square test, ANOVA and Repeated Measurement. The effects of metoclopramid and ginger was compared with placebo as referent group. Results: The intensity of changes in nausea, vomiting and Rhodes during study were statistically different in two groups of ginger and metoclopramid compared with placebo (p<0.05), but it was not statistically significant between two groups of ginger and metoclopramid. Conclusion: According to our study, ginger and metoclopramid are equally effective in reducing nausea and vomiting, and ginger could be a good alternative for metoclopramid. Keywords: nausea and vomiting in pregnancy, Rhodes’ Index, Ginger

The clinical profile of the patients who underwent laparoscopy-assisted vaginal hysterectomy after conization for CIN 3 detected by cervical punch biopsy
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Objectives: To know the clinical profile of the patients who underwent laparoscopy-assisted vaginal hysterectomy after conization for CIN 3 detected by cervical punch biopsy Methods: From May 1997 to Nov 2011, medical records of one institution were reviewed retrospectively. The date of main treatment, follow-up duration, age, reason and results of further treatment were compared according to the methods of further treatment. Results: For 11 years, 258 conizations were performed for CIN3 detected by cervical punch biopsies. The mean age was 41.4 years old and mean duration of follow-up was 35.9 months. After conization, 166 (64%) patients did not undergo further treatment (Conization only Group, COG). 51 underwent laparoscopy-assisted vaginal hysterectomy (LAVH) (LAVH Group, LG). The mean age of GOG was 38.4 and that of LG was 47.9 years old. The mean follow-up duration of COG was 38.1 months and that of LG was 22.3 months. Among LG, the causes of LAVH undergone were positive resection margins (71%),
close lesions to margin (4%). Among positive resection margin, 81% were endocervical, 14% were exocervical and 6% were both. After LAVH, 69% had no residual lesion at the resected specimen and 31% had lesions. No further treatment was given after LAVH. Conclusion: After conization for CIN 3 detected by CIN 3, 64% need no more treatment. But 20% of patients underwent LAVH. The main cause for LAVH was positive endocervical resection margin.

FC03.02
Small cell carcinoma of the uterine cervix
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Introduction: Small-cell neuroendocrine carcinoma is a highly aggressive malignancy that occurs most frequently in the lung and less frequently in non pulmonary sites. Small cell neuroendocrine carcinoma of the uterine cervix (SCNEC) is a rare finding representing 2%–5% of all cervical malignancies. It is associated with a poor prognosis even when identified at an early stage. Because of the rarity of this disease there is a paucity of information pertaining to prognostic factors associated with survival. Moreover, the optimal treatment strategies for this aggressive tumour have not yet been determined. Materials and methods: A 50-year-old woman with stage IIa small cell carcinoma of the cervix was treated with three courses of neoadjuvant chemotherapy followed by radical hysterectomy and three cycle of postoperative adjuvant chemotherapy. At the end of chemotherapy she presented with repeated episodes of ataxia and vertigo. The Computed Tomography scan of the total body revealed a lesion to the cerebellum and a liver recurrence of the tumor. Adjuvant chemotherapy was performed consisting in weekly taxol. Results: The patient died of disease progression 1 months later adjuvant chemotherapy, which was 7 months after diagnosis. Conclusions: Small cell carcinoma is a rare histology of cervical cancer associated with a poor prognosis. Although most studies have confirmed that stage is an important prognostic indicator, the optimal treatment remains to be determined, a multidisciplinary approach for management should be undertaken. This case suggests that small cell carcinoma of the cervix can metastasize to cerebellum influencing the clinical course of the disease.

FC03.03
A comparison between hysterosalpingography and 4d ultrasonography in the assessment of Müllerrian anomalies within a population of patients suffering from recurrent miscarriage
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Recurrent miscarriage affects up to 1% of couples and a proportion of these are caused by abnormalities of the uterine cavity. There is debate whether 4D Ultrasound (U/S) of the uterus is equal to hysterosalpinograms (HSG) in its sensitivity to detect the presence of a Müllerrian anomaly. Objectives: To evaluate whether hysterosalpingograms can be replaced by 4D ultrasonography of the uterus as the optimal technique to diagnose Müllerrian anomalies Materials and Methods:A retrospective comparative study was carried out comparing women in a recurrent miscarriage clinic population diagnosed with Müllerrian anomalies using a 4DU/S with those diagnosed by a HSG. The rates of detection of Müllerrian anomalies in the two populations were consequently compared and analysed. Results: 390 women were recruited to date with an age range from 20 to 45. Of these, 270 had undergone an HSG with 13 of them being identified as having an abnormality of the uterine cavity. This would translate to 4.81%. To date 120 cases of women who had undergone a 4D U/S of the uterus have been collected and out of these 5 had Müllerrian anomalies. This would give a preliminary result of 4.17%. More data has to be collected and statistical analysis used to determine the significance of these results. Conclusions:This work is currently still in progress but preliminary results indicate that 4D U/S of the uterus can be recommended as the standard routine investigation for uterine malformations. It was found to be a valuable diagnostic tool without being invasive or uncomfortable.
An unusual extremely distant non-communicating uterine horn with myoma and adenomyosis treated with laparoscopic hemy-hysterectomy: a case report

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A 41 years old woman referred to us with dysmenorrhea and severe pelvic pain although she was previously submitted to right laparotomic adnexectomy for ovarian endometrioma and to a subsequent operative laparoscopy for pelvic adhesions. At our first examination, ultrasound showed a right sided double cystic mass, completely separated from the uterus, filled with high level of homogenous echoes, consistent with the diagnosis of infraligamentary myomas. Left adnexa, uterus and kidneys appeared normal. Second ultrasound, performed immediately after an episode of pelvic pain, revealed a right sided cystic mass, filled with low level of homogenous echoes surrounded by a hyperechoic edge, joined to a smaller echoic mass, suggestive for small myoma. It was the unusual ultrasonographic picture of a recent hematometra occurred in the non communicating fibromatous right horn of the patient’s unicornuate uterus, missed in previous surgeries. Patient underwent diagnostic hysteroscopy and operative laparoscopy which confirmed the suspect of an unicornuate uterus. However, it was very unusual to see an extremely distanced right horn, without communication with uterus, without adnexa, and with a small myoma belonging to it. Moreover, omentum and bowel were attached to fundus of right horn and thick adhesions anchored it to posterior and right pelvic walls. Therefore identification of anatomical structures was difficult, as it was extremely arduous to isolate the ureter, which was involved inside the adhesions surrounding the right uterine horn. Nevertheless laparoscopic right hemy-hysterectomy was successfully performed and right horn was sent to our pathologist who recognized hypotrophic endometrium and adenomyosis.

Acute abdominal pain with haemoperitoneum and a calcified pelvic mass - a clinical report

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Introduction: Acute abdominal pain is a common presenting complaint in women. The most common gynaecological causes are: pelvic inflammatory disease; haemorrhage, rupture or torsion of an ovarian neoplasm; endometriosis; dysmenorrhea; and ectopic pregnancy or miscarriage with a positive pregnancy test. Clinical report: a healthy 48 year-old premenopausal woman presents with an acute and severe abdominal pain (right lower quadrant), nausea and malaise. Physical examination: stable vital signs; hard painful mass in the suprapubic region extending to the umbilicus (15cm in diameter), without signs of peritoneal irritation. Imaging: transvaginal ultrasound (one month ago) - anterior uterine fibroma with 4.5cm; pelvic ultrasound (emergency department) - 12 cm solid pelvic mass, with calcification foci, and a moderate amount of free fluid. Laboratory workup: Hb – 12.4g/dL, no leukocytosis, normal platelets, negative CRP, negative β-HCG and CA 125. The patient was admitted for monitoring and diagnostic evaluation, and in the first 24h, haemoglobin levels started decreasing (Hb – 7.4g/dL). Abdominal/ pelvic MRI: ovarian/ broad ligament fibroma, ovarian torsion, small volume haemoperitoneum. An urgent laparotomy was conducted: hysterectomy with adnexectomy. Pathology: right ovary fibroma, with secondary signs of torsion; uterine fibromas. Conclusion: Ovarian sex cord-stromal tumors are rare, comprising only 1.2 percent of all primary ovarian cancers (fibromas being the most common). A case is reported of a fibroma presenting as an ovarian torsion in a premenopausal woman. This is the fifth most common gynaecologic emergency and affects females of all ages. Expedient diagnosis is important but can be challenging since symptoms are relatively nonspecific.
**FC04.03**  
**The effect of GnRH agonist, SERM, antiprogesterone in the treatment of uterine myomas**  
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Objective: To compare the effect of GnRH agonist, SERM, Antiprogestrone in the treatment of uterine myomas. Design: Experimental study. Setting: University hospital research unit. Patient(s): Uterine myoma tissues obtained from eleven women (mean age = 40.45 ± 7.62) with uterine myomas through operation. Intervention(s): The cultured myoma cells were treated with GnRH agonist (leuprolide acetate) 10-9M for 72h, SERM (raloxifene) 10-9M, antiprogestrone (mifepristone) 10-7M for 48h. For the pretreatment effect of GnRH agonist, myoma cells were pretreated with GnRH agonist (leuprolide acetate) 10-9M for 72h first, and then treated with SERM (raloxifene) and antiprogestrone (mifepristone). Main Outcome Measure(s): Evaluation of myoma cell viability by MTT assay, western blot analysis for PCNA and BCL-2 protein expression. Result(s): Myoma cell viability was reduced in leuprolide acetate, raloxifene, mifepristone, single-treated group, in comparison with control. Myoma cell viability which was pretreated with leuprolide acetate was reduced in raloxifene treated group in comparison with control group. In contrast, myoma cell viability which was pretreated with leuprolide acetate was increased in mifepristone treated group in comparison with control group. Western blot analysis of PCNA-positive cell and BCL-2 protein in cultured myoma cell revealed same result in MTT analysis. Conclusion(s): Our results indicate that mifepristone single therapy is the most effective medical treatment in myoma, and if pretreated with leuprolide acetate, raloxifene therapy is the most effective medical treatment in myoma.

**FC04.04**  
**Oral alpha lipoic acid (ALA) supplementation: effect on postmenopausal bone loss**  
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Objectives: The oxidative stress plays a pivotal role in many age-related degenerative processes, such as the osteoclast differentiation in postmenopausal bone loss. Moreover, the antioxidant defenses are significantly decreased in elderly osteoporotic women. Therefore, the bone loss may be hypothetically reduced also by administration of antioxidant agents, such as the alpha lipoic acid (ALA), a necessary cofactor for mitochondrial dehydrogenases. The aim of this study was to evaluate the effect of ALA on bone mineral density (BMD) in osteopenic postmenopausal women. Materials and methods: 50 postmenopausal women with osteopenia (-2.5 < T-score < -1) were enrolled for this prospective study. Women were randomly assigned to receive 300 mg of ALA (n=25) or placebo (n=25), twice daily; each woman was supplemented also with calcium plus vitamin D. We evaluated the estimate BMD with heel quantitative ultrasonometry (QUS) at baseline and after twelve months of treatment. Results: 44 patients completed the one-year study, 23 in the ALA group and 21 in the placebo group. The treatment with ALA led to a better estimate BMD compared to placebo group (0.401 versus 0.388 g/cm²), even if this difference barely achieved a statistical significance (p=0.048). Conclusions: Our findings, even if in a small population, could suggest that the supplementation with of ALA in osteopenic postmenopausal women may have favorable effects by mitigating the bone loss.

**FC04.05**  
**Rokitansky syndrome with a normal vagina and chronic pelvic pain**  
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Rokitansky-Kuster-Hauser syndrome. Conclusion(s): Patients with mullerian malformations may be relieved from pain with a surgical removal of uterine anlagens. Our case showed unusual features that might challenge the established embryologic mechanisms of mullerian development. Furthermore, the patient we treated had a normal interpersonal life and did not experience psychological problems, highlighting the importance of vaginal reconstructive surgery for patients who do not have a vagina in order to relief potential relational disorders.

**FC04.06**  
**Analysis of the reproductive and clinical data laparoscopically Proved endometriosis patients**  
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Objectives: To analyse the reproductive and clinical data of endometriosis patients. Materials and Methods: Retrospective - descriptive study analyzing data of 82 laparoscopically proved endometriosis cases hospitalized in „Lags – centrs” hospital from January, 2004 – September, 2009. Results: Median age of patients was 31.8 years. Median menarche age was 13.2 years. 67.07% of endometriosis patients had 28 – 30 menstrual cycle. Reproductive data have shown that the number of pregnancies varies from one to six. 85.37% of study patients have complaints. 80.5% of endometriotic lesions was located in recto-uterine pouch and 63.4% in lig. sacrouterinum. III stage of endometriosis was diagnosed in 31.71% of patients. Conclusions: Menstrual cycle length, duration of period and excessive menstrual bleeding could not be the risk factors for endometriosis development in studied cases, but decreased pregnancy rate could be. Endometriosis patients had the most common complaint as infertility. The recto-uterine pouch was the most common localization of endometriotic lesions and adhesions. The third stage of disease was the most common diagnosis. We could drive to conclusion that disease was not timely diagnosed or women have come to doctor too late.

**FC04.07**  
**Role of hysteroscopy in the diagnosis of endometrial cancer, a five-year review**  
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Introduction: Endometrial cancer is currently the most prevalent gynaecological cancer in developed countries. Seventy five percent of the cases occur in post-menopausal women, usually in early stages. Over 90% of patients complain of abnormal uterine bleeding. The hysteroscopic features of endometrial carcinoma are usually typical and are characterised by a significant distortion in the structure of the endometrium, including an increased number of vessels; additionally, the endometrium bleeds easily and there is a constantly “blurred” environment throughout the exam. Endometrial sampling is mandatory for the diagnosis and the optimal staging is defined by surgical findings. Material and Methods: Retrospective study of the patients with endometrial cancer in the Department of Viseu between 2007 and 2011. The authors studied patient files and registration books and analyzed the ones who underwent hysteroscopy before surgery. Both hysteroscopies and surgeries were performed by experienced teams. Results: In the five-year period, 112 endometrial cancers were diagnosed. During this period, 3229 hysteroscopies were performed in the Department. In 64 patients with endometrial cancer (57%) hysteroscopy had been performed. No major complications occurred in these patients. The mean age for this group was 70 years old and in 90 % of cases the hysteroscopy was performed due to abnormal uterine bleeding and/or increased endometrial thickness on ultrasound. In 94% of the cases the histological findings confirmed the hysteroscopic diagnosis of cancer. Conclusions: Hysteroscopy remains as a safe, valuable and accurate tool for the diagnosis of endometrial cancer when performed by an experienced team.
Ectopic pregnancy is a common problem of early pregnancy associated with major maternal morbidity and mortality. There is a recognised association between caesarean section and ectopic pregnancy. The incidence of C-section scar ectopic pregnancy is also increasing. A lot of reasons have been suggested for the abnormal implantation of pregnancy on C-section scar. The suggestions included possibility of defect within an old C-section scar and signalling between the embryo & ectopic endometrium. The management options for scar ectopic include conservative management, medical management, radiological embolisation and surgical management (laparoscopy and open surgery). We present a case of a 39year old patient with mild PV bleeding in early pregnancy and negative ultrasound findings. She had history of previous lower segment caesarean section. Serial BHCG results were 2789 and 2956 in 48hours. Diagnostic laparoscopy revealed a 2cm suspected lesion on the anterior lower serosal surface of the uterus. The lesion was excised laparoscopically and sent for histology. The integrity of the bladder was checked with methylene blue at the end of the procedure and the uterine wall remained intact as well. The histology confirmed the presence of chorionic villi and the patient serum BHCG fell to less than 10. iu over four weeks. This case illustrated ectopic pregnancy on the serosal surface of the uterus excised successfully at laparoscopy. The presentation confirmed caesarean section scar ectopic as a recognised complication of past caesarean section. Reduction in the caesarean section delivery may help in preventing this complication.

Comparative evaluation of sexual attitude and function of normal and dysmenorrhea patients with the QSAF-2009

We evaluated 60 normal and 60 dysmenorrhea patients with the questionnaire on sexual attitude and function QSAF-2009. The latter group used routinely drugs for dysmenorrhea in a PRN basis and some used medications as prophylaxis and was free to use psychoactive medication but people using psychoactive medications were excluded from the former group. Dysmenorrhea was not graded according to severity and stress was laid on personal view about the matter (major concern versus no concern). Both groups had good compliance for accomplishing the tests. Patients without dysmenorrhea were sexually more self conscious, became sexually active earlier in their life, had lower scores in almost all sexual dysfunction scales, had higher scores in experimentation, sensational, erotic, extramarital relationship, sex addiction and lower scales in couple problems while women with dysmenorrhea showed higher scores in couple problems, sexual pain syndromes, vaginism and a series of psychodynamic syndromes (0.04>p>0.07). Curiously, these people showed higher scores in homo-bisexuality scales. They showed high rates of sexual guilt feeling and the overall validity of their test was questioned. Patients with dysmenorrhea showed increased reluctance to answer the questions, regarded their problems as personal secrets and reported fewer visits to gynecologists. They preferred female gynecologists, and had never been visited by midwives. Most of them preferred cesarean delivery under general anesthesia and had in fact convinced their physician to undergo CS. We conclude that dysmenorrhea patients are categorically distinct from normal persons in regard to their sexual attitude and function.

Effect of maternal preload on hemodynamic in patients with fetal growth restriction

Objective: To study the changes of some functional variables of antithrombosis-thrombolysis system and maternal hemodynamic. Then observe the effects in patients with Fetal growth restriction. Methods: Using ELISA methods and thrombosis auto-analyzer, some variables were detected in 65 normal late-pregnant women, and 62 FGR patients, which including antithrombin activity (ATIII) fibrinogen (Fbg),
plasminogen activity (PLG), activity of tissue-type plasminogen activator (tPA) and plasminogen, activator inhibitor (PAI-1), D-dimer. And using noninvasive instrument to check matrix change of hemodynamic.

Results: 1. Compared with the late-pregnant women, the levels of Fbg, PLG and PAI-1 were obviously higher in FGR women (P<0.05), the levels of ATIII were obviously lower in FGR women (P<0.05), the activities of tPA and D-dimer had no significant changes (P>0.05). 2. The value of SVRI, SVR were obviously higher in FGR women (P<0.05). But HR, CI, CO, SI, SV had no significant changes (P>0.05).

Conclusions: Most of the FGR women appear in the prethrombus state and had higher systemic vascular resistance. This study has an important value in the prevention and treatment of FGR. Obviously it can provide reliable theoretic basis for anti-coagulation to treat FGR.

FC05.02
Shoulder dystonia – how to avoid?
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Objectives: Sholder dystocia is a rare complication, but still an obstetrical nightmare. The aim of the study was to evaluate the prevalence of shoulder dystocia as well as risk factors predisposing to this complication among women who delivered in 2nd Department of Obstetrics and Gynecology Warsaw Medical University from 1st of January 2000 till 31st December 2010. Material and methods: We analyzed 34274 deliveries during the eleven years of observation. We included 25403 vaginal deliveries. We recognized shoulder dystocia in case of difficulty in delivering the shoulders, particularly because of impaction of the anterior shoulder behind the pubic symphysis. Results: The prevalence of shoulder dystocia was 0.15%. None of the patients with this complication presented a history of shoulder dystocia during previous deliveries. Over two third of women (68%) presented at least one of risk factors for shoulder dystocia. Diabetes mellitus was present in 28% of cases, 47% of mothers were overweight or obese before pregnancy. Birthweight exceeded 4500 grams in 24% of neonates, 53% of babies presented birthweight over 90 centile. We recognized birth injury in half of the neonates: in 7 cases (34%) - fracture of the clavicle, in 3 cases (14%) - Erb palsy. In most cases McRoberts maneuver was necessary to deliver the shoulders, but in 3 cases suprapubic pressure was performed. Conclusion: The small number of shoulder dystocia in our study is due to the precise analysis of risk factors that enables to predict this complication.

FC05.03
Can we reduce the risk of suffering of the fetus?
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Accurate assessment of fetal wellbeing during pregnancy and childbirth in clinical practice remains elusive. There has been considerable progress in methods of assessment of fetal and fetoplacental system, but accurate prognostic factors in the diagnosis of fetal pain is not enough. The key to improving this situation is to focus on situations involving high-risk prenatal (PR), and the refusal of unwanted medical manipulation in women who are at a low PR. Therefore, accurate risk assessment is crucial. Objective: to identify the reserves to improve newborn health at the stage of improving the quality of delivery. Materials and Methods. To achieve this goal was a retrospective study involving 45 observations. Analyzed birth history and maps of term infants who underwent mechanical ventilation (ALV) - 'Hardware children.' Our analysis revealed several provisions to improve newborn health at the stage of improving the quality of management of pregnancy and childbirth: the timely detection and treatment of pathological preliminary period, conversion factors, prenatal risk in childbirth; dynamic loudspeaker monitoring during labor, re-evaluation of prenatal risk factors prior to administration of uterotonic drugs; labor stimulation at disorders of fetoplacental complex and at parturients with macrosomia with the revision of the plan.
FC05.04
Immigrants present improved obstetric and neonatal outcomes compared to native women. A Northern Greek population analysis
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Objectives: Main objective of our study was to compare the incidence of obstetric and neonatal outcomes between native and immigrant women. Materials and Methods: A retrospective study of singleton pregnancies was conducted during the period 2003-2009. Women were divided in group 1, including natives and group 2, including immigrants. Epidemiological characteristics, obstetric outcomes and neonatal morbidity were compared between the two groups. Results: Out of 7033 singleton pregnancies delivered during the period 2003-2009, there were 6980 with complete information included in the final analysis. Natives consisted 52.41% of all gravidas (group 1, n=3658), while immigrants 47.59% (group 2, n=3322). The rate of emergency caesarean section was significantly higher in group 1 (13.0%) compared to group 2 (11.6%, P=.03). Preeclampsia, preterm delivery, placenta praevia and fetal distress were also significantly higher in the same group. Mean Apgar scores in the 1st and 5th minute were significantly lower in natives (P<.001). In addition, rate of NICU admission was significantly more frequent in group 1 compared to group 2 (11.5% vs. 6.6% relatively, P<.001). Similarly, neonates of native women necessitated emergency intubation in a significantly higher pattern (1.8% vs. 1.1%, P=.03). Conclusions: According to our results, pregnancies of native women are complicated with obstetric and neonatal outcome in a significantly higher rate.

FC05.05
HIV in Estonia - recent trends. HIV positive women giving birth in Pelgulinna Maternity Hospital in 2000–2010
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According to the WHO Estonia has the highest number of registered HIV cases per one million inhabitants per year in Europe. The first aim of the presentation is to give an overview of recent trends in HIV infection in Estonia and the second aim is to characterize young HIV positive women who gave birth in Pelgulinna Maternity Hospital in 2000–2010. Data about the number of HIV cases come from the Estonian Health Board. All health institutions are obliged to report to the Health Board when HIV is diagnosed. Additionally, data from publications by the Estonian National Institute for Health Development, WHO, UNAIDS and by researchers like Anneli Uusküla, Taavi Lai and Kristi Rüütel will be used. Pelgulinna Maternity Hospital is the second biggest maternity hospital in Estonia. According to the Estonian Medical Birth Registry in 2010 there were 3241 deliveries, which is 20% of all deliveries in Estonia. Data about the number of HIV positive women giving birth in Pelgulinna Maternity Hospital in 2000–2010, their social background and the HIV status of children after 6 months of birth will be presented.

FC05.06
Selective vaginal breech delivery at term – still an option
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Objectives: To compare maternal and neonatal outcome between intended vaginal or intended CS breech delivery and intended vaginal vertex delivery at term with singleton fetuses. Materials and methods: A retrospective cohort study. The term breech deliveries of January 2004 to January 2009 (254 intended vaginal breech deliveries, 497 intended breech CS)and 257 vertex controls, a total of 1008 deliveries, were analyzed. Serious neonatal morbidity according to the criteria of the Term Breech Trial served as primary end point. Low Apgar scores or umbilical artery pH < 7,05 or maternal morbidity served as secondary end
points. Results: There was no neonatal mortality. Serious neonatal morbidity was rare (two cases among intended vaginal delivery, one case among intended CS and three cases among vertex controls), with no difference between groups. The Apgar scores at one minute and umbilical artery pH were lower in the intended vaginal delivery group compared to the other groups, but there was no difference at the age of five minutes. Bleeding > 1500 ml was more common in the intended CS group (3.1% vs 9.5% vs 3.1%). Conclusions: The trial of vaginal delivery remains as an acceptable option for breech delivery.

FC05.07
Epidemiology of prolonged pregnancy: Incidence and foetal morbidity in Tunisian population
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Objective: To estimate the frequency of prolonged pregnancy and to study the associated foetal morbidity foetal. Methods: A retrospective Case-control study from July 2008 to February 2009 at the Department of Obstetrics and Gynecology of the Sfax Tunisia. Results: The prolonged Pregnancy is not uncommon, it is found in 2.42% during the study period. It affected mainly primiparous women with the average age of 27. In 95% of cases, the fetal movements were seen as normal. The ERCF was pathological in 45 cases (31.9%). The amniotic fluid was decreased in 62 cases (49.6%). The delivery was vaginal in 95 cases (67.4%), cesarean in 34 cases (24.1%) and forceps in 12 cases (8.5%). The main indication for cesarean was the acute foetal distress. The rate of macrosomia was 9.9% and post maturity syndrome was found in 33.3% of cases. The Apgar score at 5 min was less than 7 in 14.2% of cases. Only 22% of neonates had required a transfert in neonatal care unit, but we did not notice any stillbirth. Conclusion: Following this study, it is conventionally accepted that the prolonged Pregnancy is incurring risks to the mother and the fetus. The presumed cause of increased morbidity or fetal mortality in the prolonged Pregnancy is placental insufficiency leading to perinatal asphyxia, oligohydramnios, meconium-stained fluid and neurologic complications.

FC05.08
The maternal and fetal outcome of 42 triplet pregnancies in Southern Tunisia
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Objective: To determine maternal outcome as antenatal and postnatal complications and neonatal outcome as birth weight, morbidity and mortality in triplet gestation. Methods: A retrospective study from January 2008 to December 2009 at the Department of Obstetrics and Gynecology of the CHU Hedi Chaker, Sfax Tunisia including 42 cases. Results: All pregnancies ended in delivery. There were no maternal deaths. The most common antepartum maternal complications were preeclampsia (7.14%) anemia (21.42%), Urinary infection (7.14%), and metrorrhagia (21.42%). Preterm labor requiring tocolysis occurred in 50%, preterm premature rupture of membranes in 19.4 %. Prophylactic cerclage was performed in 23.8% of cases, and 38.1 % of patients received steroid prophylaxis. The mean gestational age at delivery was 33.5 weeks. The Apgar score at 5 min was less than 7 in 28.57% of cases and the mean birth weight at delivery was 1780 g. One Stillbirth was reported , 15% of newborns had died in neonatal care unit. The two major causes of neonatal mortality were immaturity (42.1%) and hyaline membrane disease (31.6%). 11.9 per thousand of infants had some malformations however no congenital anomaly was detected. 52.5 % of infants required ventilation or oxygen therapy or both. Conclusion: Both the maternal and neonatal risks should be considered when patients with triplets are counseled before the decision to continue the triplet gestation or to reduce multifetal pregnancy.
Fetal macrosomia: risk factors and obstetrical prognosis. case-control study about 1283 cases

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Objectives: The aim of this study was to identify risk factors of fetal macrosomia (FM) in our population as well as obstetric complications. Methods: Retrospective case-control study during two-year period from 1 January 2007 to 31 December 2008 in the Department of Obstetrics and Gynecology Sfax Tunisia. Results: During the study period, 18,289 births were recorded. 1283 FM and 1283 controls have been included. Macrosomic babies represented 7% of the infants delivered. Statistical analysis showed that mothers of macrosomic newborns were older (20.6 % vs. 14%; P < 0.001) and higher parity (69.2% vs. 59.2%; P<0.001). The study group had more mothers with previous history of macrosomic babies (28.2% vs. 2.2%), diabetes (3% vs. 0.5%), significant higher cesarian section rate (35.6% vs. 15.5%, P < 0.001), and operative vaginal delivery (10.13% vs. 4.2%) compared with the control. There was male dominance in the study group compared with the control (64.4% vs. 44.7%; P = 0.001), higher risk of neonatal respiratory distress (35.2% vs. 10.8%), and greater mean birth weight (4 ± 0.4 kg vs. 3.2 ± 0.6 kg; P = 0.002). There were 148 (17.9%) cases of shoulder dystocia in the macrosomic group and 14 cases (1.4%) in the non-macrosomic group. Conclusion: The precise determination of fetal weight is only done at delivery. Clinical and ultrasound determination of fetal weight are highly imprecise especially at the third trimester. The route of delivery should therefore be individualized.

Total laparoscopic radical hysterectomy versus abdominal radical hysterectomy with lymphadenectomy in patients with locally advanced cervical cancer after neo-adjuvant chemotherapy

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Objective: To evaluate the feasibility and morbidity of total laparoscopic class C2 radical hysterectomy (TLRH) versus total abdominal class C2 radical hysterectomy (ARH) in patients with locally advanced cervical cancer stage IB2 to IIIB after neo-adjuvant chemotherapy (NACT). Material and Methods: A retrospective case-control study including 35 patients with locally advanced cervical cancer undergoing TLRH compared with 44 similar patients treated by ARH. Results: Mean age of patients was 48.34 and 48.16 years for women undergoing TLRH and ARH; mean body mass index (BMI) was 23.8 and 24.9 Kg/m2, respectively; mean operating time was 254.49 and 284.57 minutes respectively (p<0.05); mean blood loss was 304.86 and 500.68 milliliters respectively (p=0.003); mean length of hospital stay was 6.5 and 9.3 days (p=0.001). No statistically significant difference was found between the two groups when the number of lymph nodes was compared. One conversion to laparotomy was necessary for anesthetic complication. Seven patients received blood transfusion (1 in the laparoscopic group and 6 in the laparotomic group). Long term complications (urinary and bowel symptoms) occurred in 28 patients of laparotomic group and in 13 patients of laparoscopic group. Four patients had a recurrence (2 in the TLRH at 9 and 19 months of follow-up and 2 in the ARH at 11 and 46 months of follow-up). Conclusions: This study indicates that TLRH can be performed also in locally advanced stage cervical cancer after neoadjuvant chemotherapy; this technique is feasible and safe, with less blood loss and less intraoperative and postoperative short term complications.
Objective: The aim of this study was to characterize the cases of carcinoma of the vagina over the past seven years in our Hospital. Material and Methods: Retrospective study of all women with histological diagnosis of carcinoma of the vagina between January 2005 and December 2011 in Braga Hospital. Data collection was conducted through consultation of the clinical chart with the characterization of each case with respect to age, symptoms, personal history and histological characteristics. Results: The study population included 24 cases (mean age 62.8 years). All reported cases are related to metastatic disease. The cases of metastasis had as place of origin of the primary carcinoma, in order of the most common, the carcinoma of the cervix (33.3%), endometrium (16.7%), rectum (16.7%), ovarian (8.3%); vulva (4.2%), colon (4.2%), stomach (4.2%), kidney (4.2%), carcinosarcoma (4.2%) and breast (4.2%). The time for relapse, after the primary carcinoma, occurred in 12 (50%) cases within the first year. In 21 (87.5%) cases, recurrence occurred within 4 years. We noted single cases of relapse after 5, 6 and 30 years. The most common presenting symptom was vaginal blood loss (50%); following pelvic pain associated with vaginal blood loss (8.3%) pelvic pain associated with obstructive uropathy (8.3%), only pelvic pain (4.2%), changes in pelvic examination (16.7%) and altered vaginal cytology (12.5%). Conclusions: Over the past 7 years we found 24 cases of carcinoma of the vagina, all of them corresponding to metastasis. The most common site of origin was the carcinoma of the cervix with the majority of cases recurring within 1 year. The most common presenting symptom was vaginal blood loss.

Although uterine prolapse and carcinoma of the uterine cervix are not rare events, their association is very uncommon. The treatment of cervical cancer has been protocolled, but management of uterovaginal prolapse associated with carcinoma of the cervix is not standardized and therapy strategies vary considerably between the few published cases. We report here the clinical characteristics of a 74-year-old patient, admitted in the ER with an ulcerated prolapsed uterus. Biopsy of the ulcerated cervical lesion confirmed invasive epidermoid carcinoma. The patient underwent vaginal hysterectomy plus bilateral ileo-pelvic lymphadenectomy complemented with quimioradiotherapy. We believe that this case typically rare to see in a developed country might be a useful addition to the few published reports.

Preoperative preparation in prophylaxis of thrombotic complications in cancer patients
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The purpose: To specify an optimum schedule of administration LMWH for prophylaxis of thrombotic complications in cancer patients in perioperative period. Materials and methods: 676 cancer patients in accordance to scheme of LMWH administration was divided in 3 groups: I – LMWH (Fraxiparine) 24 hours prior to surgery treatment, further once a day on 0.3 ml within 10 days in the postoperative period – 212 patients. II – LMWH (Fraxiparine) once day on 0.3 ml within 10 days in the postoperative period – 216 patients. III – Unfractionated heparin on 5000 IU three times a day within 10 days in the postoperative period – 248 patients. Conclusions: Perioperative period is the extremely dangerous for thrombotic complications risk and demands careful control of a hemostasis system functions. At present till now still there is no uniform tactics of thrombotic complications prophylaxis in perioperative period. The scheme offered by us: LMWH 24 hours prior to operative intervention, further once a day on 0.3 ml within 10 days in the postoperative period can be recommended all cancer patients as the program-minimum, however for 10th day of application of such scheme it is necessary to control of a condition of hemostasis system in order to determine necessity of continuation of prophylaxis application of LMWH. Besides that, we consider necessary to provide the analysis of genetic forms of thrombophilia and APS for all cancer patients with clinically expressed thrombotic complications.

Chemoradiation in locally advanced cervical cancer
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Objectives: To assess the response of chemotherapy and chemoadjuvant radiotherapy in patients with locally advanced cervical cancer. To analyze side effect profiles of chemotherapy & chemoadjuvant radiotherapy. To observe the contribution of chemotherapy in increasing locoregional and systemic control of the disease. To evaluate a new mathematical model to help compare results of various clinical studies. Materials and Methods: Prospective, randomized study in a tertiary care university hospital in south India. One of the largest randomized studies of its type, 120 patients with locally advanced cervical cancer (40 stage IIB, 80 stage IIIB) were randomized to receive 2 cycles of Cisplatin, Vincristine and 5-Fluorouracil followed by radiotherapy or radiotherapy alone and the responses were assessed. Results: Patients with good clinical responses to chemotherapy responded to subsequent radiotherapy. Clinical stage, tumor size & burden had an inverse relationship to clinical response. Nausea/vomiting and alopecia were the major side effects of chemotherapy. Diarrhea, local skin reaction and alopecia were the major side effects of radiotherapy. Our modified score was a better indicator of response compared to previous ones. Conclusions: Chemoadjuvant radiotherapy is safe in the combination used in this protocol. This may have a role in patients with large tumor burdens and in patients who are inherently better responders to this treatment. Further research is needed to determine this subgroup of patients and in modalities which prevent the development of cervical cancer. Till then widespread education and screening will be the mainstay to decrease the morbidity from cervical cancer.
FC06.07  
Completeness of excision and follow up cytology in patients treated with loop excision biopsy (LLETZ)

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Introduction: Screening programs have made a huge impact on decreasing the morbidity of Cervical Cancer. Follow up of women with high grade lesions treated by excision (LLETZ/Cone) is controversial especially if the completeness of excision is unsure during histological analysis. Methods: Audit of patients attending the Colposcopy clinic at Ipswich Hospital, Ipswich, UK. All patients undergoing LLETZ were assessed & data analyzed statistically. Results and discussion: Most patients were in the 21-40 age group. All were seen within the target waiting periods. 79 (33.5%) patients presented with Low grade, 134 (56.8%) with high grade cytological lesions and 5.1% with glandular abnormality. “See and treat” rates were 60.7% for moderate dysplasia, and 56.4% for severe dysplasia. Most patients with Moderate and severe dysplasia on Cervical smear showed CIN2 and CIN3 respectively on histological analysis. Only 18.2% of patients with moderate dysplasia and 8.9% of patients with severe dysplasia justified “first biopsy” management. There appeared to be a higher tendency for “first biopsy” in younger patients. Only 6 out of 64 patients with “incomplete excision” on LLETZ had positive cervical smears on subsequent 12 month follow up with 3 borderline, 1 moderate and 2 severe dyskaryosis on follow up smears. Conclusions: There is a need for an increase in “See and treat” patients unless the clinical picture and findings at colposcopy indicate otherwise. Cytology correlated well with Histology. Patients with incomplete excision do well; however caution is needed as high grade lesions can be detected at a later stage.

FC06.08  
A discordant risk classification in curettage and hysterectomy specimens in endometrial cancer is reflected in metastatic risk and prognosis

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Introduction: In endometrial cancer, tissue for histological evaluation is obtained preoperatively as endometrial biopsy and postoperatively. Clinicians base advice for adjuvant treatment and prognosis on the histology obtained after hysterectomy. Curettage results are thereafter ignored, including when results are discordant in grade or histological type. We wanted to investigate if a discordant risk classification based on curettage and hysterectomy specimens is reflected in metastatic risk and prognosis. Material and Methods: We analysed data on 1374 prospectively included patients (MoMaTeC study). Mean follow-up was 32 months. Curettage and hysterectomy specimens were classified as low (endometrioid and adenosquamous grade 1 and 2) or high risk (endometrioid and adenosquamous grade 3, all other histological subtypes) and related to presence of lymph node metastasis. Survival differences were calculated by means of Kaplan-Meier and Cox proportional hazard models. Results: A discordant risk in curettage and hysterectomy was found in 206 (15%) cases. Lymph node metastases were detected in 6.9% and 23.0% of patients with concordant low and high risk respectively, compared to 13.9-19.7% in the discordant groups (p<=0.001). 5-year survival in the discordant groups proved intermediate (71.6-80.2%) to those with concordant low (94.4%) or high (56.6%) risk. Cox analysis showed both hysterectomy (HR 3.2) and curettage (HR 3.0) results to have independent prognostic impact on survival. Conclusion: A discordant risk in curettage and hysterectomy identifies an intermediate group with respect to disease spread and prognosis. Curettage results
therefore remain important also with the hysterectomy histology available and should be incorporated in the clinical practice.

**FC07.01**

**Dramatic increase in anti-incontinence and anti-prolapse procedures in Belgium due to availability of meshes**

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Objective: In 1998 the mid-urethral prosthetic tape TVT (and TOT in 2001) was introduced on the Belgian market. They became the gold standard of anti-incontinence surgical procedures. In 2005 meshes became available for prolapse repair. What was the evolution in the national rates of surgical procedures for stress urinary incontinence/prolapse between 1997 and 2007. Design: Population based cohort study. Setting: Belgium. Population: All women (>20 years) who underwent anti-incontinence/prolapse surgery in that period. Methods: The evolution of the number of surgical procedures was assessed using the register of the Belgian National Health Insurance Fund (RIZIV), covering all anti-incontinence/prolapse operations in Belgium. Main outcome measures: Evolution of the age-adjusted rate of surgical procedures per 1000 women. Results: The age-adjusted rate per 1000 women of surgical procedures for stress incontinence amounted to 0.54 in 1997 and increased to 2.03 in 2004 (2.01 in 2007). This fourfold increase coincided with the introduction on the Belgian market of the TVT (+66% more interventions between 1998 and 2001). After the introduction in 2001 of the transobturator tape, the rate increased more dramatically (+118% between 2001 and 2004). Anti-prolapse surgery increased by 36% between 1997 and 2007. During this latter period, the proportion of gynaecologists who participated in anti-incontinence/prolapse surgical interventions rose by 44%; for urologists the rise amounted to 55%. Conclusions: The age-adjusted rate per 1000 women of surgical procedures for stress urinary incontinence in Belgium increased by 272% and for anti-prolapse by 36%. The availability of mesh sling operations coincided with these increases.

**FC07.02**

**The prevalence of major abnormalities of the levator ani muscle in women suffering from moderate pelvic organ prolapse**

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Objectives: The aim of our study is to assess morphological characteristics of levator ani muscle in symptomatic patients with stage 2 of prolapse and if the presence of levator avulsion is associated with higher dimensions of urogenital hiatus. Materials and methods: We performed standard 4D ultrasound exam of pelvic floor according to Dietz methodology in group of 53 patients with stage 2 of pelvic organ prolapse. Measured parameters were: bladder neck-symphysial distance, area of urogenital hiatus and levator-urethral gap bilaterally, all during rest, squeeze and Valsalva. All results were statistically evaluated. Results: The incidence of levator ani avulsion in this selected group was 45.2% generally. All other measured parameters in these patients were significantly higher than normal values. Conclusions: The incidence of major levator ani injury in our group is higher than in current literature which is probably due to selected patients with prolapse. We were not able to demonstrate that presence of avulsion injury significantly alters other biometrical parameters in patients with stage 2 symptomatic pelvic prolapse, which may be caused by fascial defects.

**FC07.03**

**Laparoscopic vesicovaginal fistula repair with bovine pericardium interposition: series of first 8 patients**

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Vesicovaginal fistula (VVF) is an uncommon distressing condition, often complicating pelvic surgery, with abdominal hysterectomy for benign disease accounting for most of its. VVF can also be related to radiation for pelvic neoplasms, infections and obstetric trauma. A consensus on the “gold standard” route to repair
VVF has not yet been reached, and the choice between vaginal and abdominal ones varies according to the size, cause, and location of the fistula. Laparoscopy should be considered as a minimally invasive option for patients with supratrigonal VVF, thanks to its excellent exposure of pelvic structures, view magnification and lower morbidity compared to laparotomy. More effective repair is often associated with use of interposition graft to reinforce tissues, even if the most applied grafts, such as fibrous-fatty labial tissue, gracilis muscle or omentum can be very disfiguring or difficult to mobilize as needed. Alternatively, acellular bovine collagen can represent a less injuring option. In this case series of eight patients we present our experience in successful laparoscopic VVF repair with bovine pericardium xenograft interposition. All patients were first managed with conservative therapy for at least 3 months, which failed in all cases. Three patients had developed VVF after laparoscopic hysterectomy performed for benign disease, one after emergency laparotomic hysterectomy for postpartum uterine atony and the last four after radiation subsequent laparotomic hysterectomy for cervical and endometrial cancers. No intraoperative or postoperative complications occurred in all patients, and no VVF recurrences were registered at follow up.

**FC07.04**

**Sacrosinous fixation for prolapse- 5-year-follow-up in 565 women**

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8-30% of all women suffer from symptoms of prolapse, some needing surgical repair. As traditional reconstructions had high failure rates Amreich and Richter developed the sacrosinous fixation of the vaginal vault in the mid last century. It is said to be a demanding procedure, but, in spite of the wide-spread use of alloplastic materials, we are still happy with this technique. We want to present the results of 565 women that have been operated between 2002 and 2008 with a mean follow-up of 4.2 years and a mean age of 65.4 years. We will present the perioperative situation and complications. In the follow-up we stressed on the subjective estimation of the situation, including disorders of micturition, defecation, sexual intercourse, additional treatments needed. 87.4% were satisfied with the result of the operation, 77.6% described a marked increase in quality of life. 8% needed further operation for incontinence or recurrency of prolapse. Summary: In the light of the open debate about the widespread use of alloplastic materials, socio-economic aspects and the fact, that, at least in our hands, the sacrosinous fixation is a quick procedure with uncomplicated recovery and marked improvement of quality of life we believe, that this operation is part of the repertoire in pelvic floor reconstruction.

**FC07.05**

**3D/4D pelvic floor ultrasound – comparison of urogenital hiatus parameters after elective and acute Caesarean section**

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Aim: Comparison of morphological parameters of urogenital hiatus after elective and acute Caesarean section. This work is part of a larger study focused on pelvic floor changes after delivery. Methods: Study is prospective, open and non randomised. All patients underwent 3D/4D ultrasound pelvic floor examination 6 weeks after Caesarean section, volumes were analysed offline. Parameters were measured at rest, upon contraction and during Valsalva manoeuvre. We measured total area of the hiatus (UGH), its anteroposterior and laterolateral dimensions (A,B,C), levator-urethral gap (LUG) and parameter H. We measured these parameters in 97 women and than compared measurements in women after elective and acute Caesarean section. Results: Mean UGH at rest was 11.57cm², upon contraction 10.31cm² and during Valsalva 13.94cm². Mean LUG on the right side was 1.9cm and 1.89cm on the left side. Mean H at rest was 3.23cm, upon contraction 3.49 and during Valsalva 2.51cm. The only parameter that reached statistical significance when comparing women after elective and acute Caesarean section was UGH during contraction, which was smaller in women after elective Caesarean Section. Conclusion: We haven’t found avulsion injury in any of the women after Caesarean section. The only parameter of the urogenital hiatus that reached statistical significance when comparing women after acute and elective Caesarean section was area of the urogenital hiatus during contraction which was smaller after elective Caesarean section.
A prospective randomized trial comparing TVT versus TOT: subjective cure rate and satisfaction in median follow-up of 46 months

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Objective: To investigate subjective cure rate and patient satisfaction of TVT and TOT mini-invasive surgical methods in treatment of stress or mixed urinary incontinence. Material and methods: From January 2004 to November 2006 a total of 100 patients suffering from stress or mixed urinary incontinence and evaluated to need operative treatment were randomized to undergo either the TVT or the TOT surgery in Oulu University Hospital. There were no significant differences between the two groups in the patient characteristics. During the three-, 14- and 46 months follow-up steps the information on subjective cure and patients’ satisfaction was gathered with Urinary Incontinence Severity Score (UISS) and Detrusor Instability Score (DIS) questionnaires and specific question about satisfaction. Results: The subjective cure rate was 81 % in both study groups. Satisfaction rate was 79 % in the TVT group and 74 % in the TOT group after total follow-up. When subjective cure was considered failed, 78 % of the patients was unsatisfied. Urge symptoms revealed in 79 % of patients in the mixed urinary incontinence subgroup. De novo urgency occurred in 17 % of the patients in the stress urinary incontinence subgroup and 45 % of these patients were unsatisfied after the follow-up. Conclusions: TVT and TOT are equally effective methods in treatment of urinary incontinence and patient satisfaction is similar with both methods. Patient satisfaction diminished radically when treatment failed or de novo urge symptoms occurred. Great proportion of patients with mixed urinary incontinence found operation beneficial to urge symptoms.

Does the perineometer reliably measure perineal descent in women with pelvic organ prolapse?

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Objectives: Perineal descent (PD) is associated with pelvic floor weakness in patients with anorectal dysfunction and may be associated with pelvic organ prolapse (POP). The perineometer is a non-invasive tool for measuring PD. This study is the first to test the perineometer’s reproducibility in left lateral and lithotomy positions in women with POP. Methods: Intra- and inter-observer reproducibility was assessed in 50 and 24 women awaiting POP surgery. Two trained researchers used the St Mark’s perineometer to measure PD. Measurements were blindly obtained at rest, at maximum Valsalva and at a predetermined valsalvometer setting, in lithotomy and the left lateral position. Results were compared using Bland-Altman analysis. Results: Mean intra-observer difference in 50 women in lithotomy was 0mm at rest, 0mm on Valsalva and 0mm using the valsalvometer. The 95% limits of agreement were -2 to 3mm in all three measurements. Mean inter-observer differences in 24 women in lithotomy position were 0mm at rest, 2mm on Valsalva and 0mm using the valsalvometer. Mean differences in left lateral position were 0mm, 2mm and 2mm respectively. The 95% limits of agreement were narrower in lithotomy than in left lateral (-3 to 3mm vs. -14 to 14mm, -3 to 6mm vs. -11 to 16mm and -4 to 5mm vs. -10 to 15mm respectively). Conclusion: Perineal descent measurements using the perineometer have small intra- and inter-observer variability, suggesting the perineometer is a reliable tool for investigating perineal descent in women with POP. The narrower 95% limit of agreement favours the lithotomy position.

Sustained effectiveness of percutaneous tibial nerve stimulation for overactive bladder syndrome: two year follow up of responders

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Objective: To describe the long term effectiveness and safety of percutaneous tibial nerve stimulation (PTNS) in 30 women with overactive bladder syndrome (OABS) unresponsive to pharmacotherapy. Methods: 30 women who had maintenance treatment following initial positive response to PTNS were
reassessed at two years using the original outcome measure tools ie bladder symptom diaries and Incontinence Impact Questionnaire (IIQ-7). They were also questioned on acceptability and any adverse effects of long term peripheral neuromodulative treatment. Results: Data from 23 women were available and 7 had been lost to follow up. With maintenance treatment, the mean nocturnal frequency at 2 years had decreased by 33% (2.76 to 1.82 times/night) while the mean IIQ-7 had reduced from 64.82 to 46.88 (both p<0.05) compared to baseline. Mean nocturnal frequency and IIQ-7 scores at 2 years were greater than that documented after initial response to treatment at 6 weeks, suggesting an attenuation of response but the differences were not statistically different. The women received a mean of 8.42 treatments per year, 6.06 cycles per year and the mean length between treatments was 79.8 days. Apart from hypoaesthesia in the heel in one responder lasting for 4 months, there were no reported side effects. Conclusion: Women receiving PTNS for intractable OABS still reported significant symptom relief at 2 year, although there is a suggestion of attenuation of response. This remains a safe mode of second line treatment with excellent durability.

**FC07.09**

Laparoscopic nerve preserving sacropexy

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Objectives: the aim of the study is to investigate the presence of etiologic correlations between surgical damage of autonomic pelvic fibers during laparoscopic sacropexy (LSP) and the post-operative obstructed defecation syndrome (ODS). Materials and methods: between September 2007 and December 2009, 18 patients underwent LSP. Four out of 18 (22,8%) showed obstinate constipation during the post-surgical period and a critical revision of the technique was carried out. It has followed an anatomical study on 5 cadavers with definition of the so-called “right-angled dissection triangle” in the right hemi-sacrum and individuation of 10 variables of risk of potential denervation. Therefore, it was carried out an elaboration and a blind evaluation of the 18 intra-operative videos according to the 10 variables previously individuated. The data of the 4 female patients with ODS were compared with the ones of the 14 remaining patients. Results: it was pointed out a statistically significant association between the post-surgical ODS and the dissection in the right-angle of the dissection triangle. At this level, the caudal part of the superior hypogastric plexus (SHP) runs. Conclusion(s): the ODS that variably follows the sacropexy is due to a plausible sympathetic autonomic apraxia, caused by a lesion of the caudal part of the SHP or the right hypogastric nerve, during the dissection of the sacrum. On the basis of the results obtained, we modified our surgical technique; all of the 12 operated patients between January 2010 and December 2010 were treated with a modified technique, preserving the autonomic fibers.

**FC08.01**

Predictive value of uric acid in adverse perinatal outcomes and gestational complications in pregnant women with chronic hypertension

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Nowadays there are lots of discutable questions in the field of pregnancy course and perinatal outcomes in women with chronic hypertension. To prognose these complications it is necessary to find optimal early predictive tests. Objective: to determine predictive value of uric acid in adverse perinatal outcomes and gestational complications in pregnant with chronic hypertension. Methods and materials: we examined 50 women with chronic hypertension in 34-40 week of pregnancy by means of laboratory measurement of
serum uric acid, ultrasound assessment of fetoplacental complex. Depending on uric acid level all pregnant women were divided into 17 women with hyperuricemia and 33 – with its normal levels. Results: Hyperuricemic chronic hypertension mothers were associated with higher probability of placental insufficiency (88.2% versus 12.2%; p = 0.05), preeclampsia (32.7% versus 7.2%; p = 0.05), preterm labor (41.2% versus 9.09%; p = 0.05) and delivery by caesarean section (52.4% versus 15.2%; p = 0.05). There was a significant negative correlation between uric acid levels and gestational age, but a positive association between uric acid levels and admission to neonatal unit (p < 0.005). There were no neonatal deaths. Conclusion: We revealed hight number of adverse perinatal outcomes and gestational complications in hyperuricemic pregnant with chronic hypertension.

**FC08.02**  
Preliminary analysis of sFlt-1/PIGF ratio and uterine artery blood flow changes in hypertensive pregnancies  
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Objective: To evaluate correlation of increased sFlt-1/PIGF ratio and abnormal uterine artery blood flow and prematurity in cases of hypertensive disorders of pregnancy. Materials and methods: Cross sectional study of 80 in-patients with hypertension or preeclampsia was performed in Kaunas perinatal center since July to December 2011. sFlt-1/PIGF ratio and uterine artery blood flow changes were evaluated in all cases of hypertension and preeclampsia. Results: Hypertensive patients with sFlt-1/PIGF ratio above 100 had higher incidence of preterm birth before 37 weeks (p< 0.005). Preeclampsia was significantly more common in cases with sFlt-1/PIGF ratio above 30. The correlation between abnormal blood flow in uterine arteries and increased sFlt-1/PIGF ratio (above 50) was found to be significant as well as correlation between abnormal blood flow in uterine arteries and prematurity (birth before 37 weeks). Conclusions: High sFlt-1/PIGF ratio and abnormal uterine artery blood flow correlates significantly with preterm birth and preeclampsia.

**FC08.03**  
SFlt-1, PIGF and their ratio in different manifestations of preeclampsia  
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Objective: We investigated sFlt-1, PIGF and their ratio variation in different manifestations of preeclampsia, correlation with uterine blood flow, blood pressure, proteinuria and liver enzymes. Materials and methods: Study included 46 patients with different manifestations of preeclampsia treated in Kaunas University Clinics during the period of 01 06 2011- 01 12 2011 and 46 controls with normal pregnancy. SFlt-1, PIGF concentrations and SFlt-1/PIGF ratio was compared in cases of preeclampsia to 46 controls, then the same variables were compared in cases of early- onset versus late-onset and between severe versus mild preeclampsia. Also the angiogenic factors correlation to uterine blood flow, proteinuria, blood pressure and liver enzymes was investigated. Results: SFlt-1 concentration, sFlt-1/PIGF ratio was significantly higher and PIGF concentration lower in preeclamptic patients compared to controls (p<0.0001), as well as in cases of early- onset ( n=17) compared to late- onset (n=29) preeclampsia (p<0.001, p<0.0001 and PIGF ), and in the cases of severe (n=26) preeclampsia compared to mild(n=20) preeclampsia (p<0.008, p<0.002 and p<0.027). SFlt-1 correlated significantly with proteinuria (p<0,001, r=0.5) and GOT (p<0.013, r=0.4). PIGF correlated with maximal systolic blood pressure (p<0.014, r=-0.3) and GPT (p<0,029, r=-0.36). Conclusions: SFlt-1concentration, sFlt-1/PIGF ratio was significantly elevated and PIGF concentration significantly lower in cases of preeclampsia, compared to normal pregnancies as well as in cases of severe and early onset preeclampsia compared to mild and late preeclampsia . SFlt-1 concentration correlated significantly with proteinuria and GOT, while PIGF concentration correlated with maximal systolic.
Prediction of hypertensive disease in pregnancy remains a challenge in modern obstetrics. Risk factor based screening, ultrasound and serum markers have been used with varying success. As pre-eclampsia would appear to occur due to changes in the vasculature, the vessel wall has been investigated as a predictor of hypertension in pregnancy. This study looked at pulse pressure wave analysis, using the diastolic portion of the cardiac cycle, in the prediction of hypertensive disease of pregnancy. Women were recruited from the antenatal clinic. Women with known cardiac disease were excluded. All women had pulse pressure waveform analysis performed in the first half of pregnancy. The primary outcome studied was the development of hypertensive disease of pregnancy. Pulse wave analysis was performed on 600 patients. The elasticity of the arterial vessel wall differed in hypertensive pregnancies and in particular in pregnancies subsequently complicated by pre-eclampsia. In early pregnancy, the mean arterial pressure (p=0.006), large artery elasticity (p=0.006) and systemic vascular resistance (p=0.03) were all significantly different in women who later developed pre-eclampsia compared to normal pregnancy. Pulse pressure waveform analysis may be a useful screening tool in the prediction of hypertensive disease and in particular, pre-eclampsia. Use of this technology in combination with other screening tools may aid in the selection of high risk pregnancy for more intensive antenatal care.

Pulse pressure waveform analysis compared to Doppler ultrasonography as a screening tool for hypertensive pregnancy

Pre-eclampsia is a hypertensive disorder unique to pregnancy. Accurate prediction of the development of pre-eclampsia is still elusive. Uterine artery Doppler provides information regarding blood flow within the vascular system. Information on the elasticity in the vessel wall is obtained from pulse pressure analysis. The purpose of this prospective study was to compare uterine artery Doppler indices with pulse pressure waveform analysis in the prediction of pre-eclampsia in low-risk pregnancy. Patients were recruited from the antenatal clinic. Each patient had uterine artery Doppler and pulse pressure waveform analysis performed in the second trimester. Data on pregnancy outcomes were obtained and the main outcome measure was the development of pre-eclampsia. Logistic regression was used to evaluate the parameters as predictors of pre-eclampsia. Forty one patients were recruited into the study. Pre-eclampsia occurred in 2 (4.9%) of the pregnancies which equates to a prior risk of 1 in 21. Small artery elasticity (p=0.02) and systemic vascular resistance (p=0.005) were shown to differ in patients with pre-eclampsia as did the mean arterial pressure (p=0.01). There was no difference seen in uterine artery Doppler pulsatility index in the pre-eclamptic pregnancies compared to normal pregnancy. Pulse pressure waveform analysis shows promise as a screening tool for pre-eclampsia. This study is the first to compare elasticity, using the diastolic phase of the cardiac cycle, and uterine artery Doppler ultrasound in pregnancy as a predictor of pre-eclampsia. A larger study should be undertaken to further evaluate pulse pressure waveform analysis.

The role of ultrasound in late-onset IUGR diagnostics and correlation with histological placental examination

Objective: Correlation of ultrasound diagnostic parameters and histological analysis of placenta.Methods: Retrospective study in period of time from 11/2011 to 01/2012 with goal of looking up for patients with late-onset IUGR diagnosis (EBW < 5 pt) where ultrasonography shows deterioration of flowmetry parameters in uteroplacental and fetoplacental circulation also with centralization of fetal circulation from 31st week of
gestation. Also finding of low amniotic fluid levels is important predictive factor of this diagnosis. Pregnancy assessment and observation, fetal monitoring and active approach to pregnancy termination after 32nd week of gestation. Consecutive doppler abnormalities and placenta histology trade off seems to be helpful in IUGR cause determination. Results: Summary of dynamic changes in doppler velocimetry and biophysical profile and its comparing with histopathological examination of placenta. In the study period total of 15 pregnant women were longitudinally examined and were consensual in all observed parameters. Observation of doppler abnormalities progression in maternal and fetal circulation and detection of centralization (cerebro-placental index < 5 pt) of fetal circulation, which is based on brain sparing phenomenon. Biophysical profile results significantly confirm fetus deprivation after 32nd week of gestation. Seven placentas examined histologically from our set off. Due to peripheral villous hypoplasia as typical sign also abnormally small placenta was present. Conclusion: In managing IUGR early identification and intensive fetal monitoring are playing the main role. The aim of this study is to consider the compromise risk of the fetus and decide about pregnancy termination regarding to the best postnatal adaptation.

FC08.07
Expectant management of severe preterm preeclampsia in a tertiary care center in a developing country (Tunisia)
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Objective: The present study was undertaken to determine perinatal and maternal outcomes in severe preeclamptic women between 28-34-week gestation following expectant management. Methods: Retrospective study from 1 January 2007 to 30 September 2009 including 97 cases of severe preterm preeclampsia occurred between 28 and 34 weeks' gestation in the Department of Obstetrics and Gynecology Sfax Tunisia. They were classified according to expectative results at 48 hours after admission into two groups. Group 1 «success expection » included 56 patients and Group 2 « expection failure » included 41 patients. Statistical analysis was performed by Student t test and chi 2 test. Results: Ninety-seven women were studied during a 33-month period. The incidence of severe preeclampsia in our population was 0.98%. Mean age was 30.8±6 ans in group1 and 30.4±7 ans in group 2. The median overall prolongation of gestation was 7.4±7 days in group 1. There were no maternal mortalities; however, 7 (12.5%) women in group 1 and 13 (31.7%) in group 2 developed significant morbidities (p=0,02). HELLP syndrome, renal impairment and placental abruption were the main complications. The mean birth weight in group 1 was 1856g and 1629 g in group 2(p = 0,465). The Apgar score were similar among the groups (p 0.173 ‘1min’ and 0.344 ‘5min’). Perinatal mortality were similar too among the groups (p=0.2). Conclusion: Expectant management of severe pre-eclampsia from 28 to 34 weeks' gestation in a tertiary care unit is acceptably safe by improving perinatal outcome with a minimal risk for the mother.

FC09.01
Is ultrasound monitoring of the ovaries during ovulation induction by clomiphene citrate essential? A systematic review
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The study objective was to investigate whether ultrasound (US) monitoring is essential during treatment with clomiphene citrate (CC) for ovulation induction, as recommended by the Royal College of Obstetricians and Gynaecologists (RCOG) and the National Institute for Clinical Excellence (NICE). We performed a systematic review of all studies investigating the effects of US in the treatment of ovulatory dysfunction with CC. The main objective of this review was to investigate whether US monitoring during CC treatment reduced multiple pregnancy rates. There was insufficient evidence to suggest that US monitoring reduces multiple pregnancy rates or improves pregnancy rates. On the other hand, no indication that treatment with CC is safe without US monitoring was identified. The small number of relevant studies and the heterogeneity observed in the methodologies of each study prohibit reliable conclusions to be drawn.
There is currently no basis for amending the evidence base (good-practice points) used in the RCOG and NICE guidelines, which recommend the use of US to monitor the ovaries during stimulation with CC.

**FC09.02**

**Fertility preservation through oocyte cryostorage in a fragile X premutation carrier**

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Objectives: Premature ovarian insufficiency (POI) is characterized by hypergonadotropic amenorrhea in women under forty years. POI incidence is increasing due to gonadotoxic cancer treatments, ovarian, autoimmune and genetic diseases. Among genetic causes, mutations of the FMR1 gene is responsible for the “fragile X syndrome”. The classic syndrome is associated with 200-repeats expansion of a trinucleotide element (CGG). The 55- to 200- repeats expansion, instead, is associated to the state of premutation carrier with a POI incidence of 15-20%. Materials and methods: A 22-year old patient was referred to our clinic with polycystic ovaries. AMH was at the lower limit (1.1 pg/ml), and ultrasound examination showed a poor antral follicle count (AFC 4) and low ovarian volume. Once diagnostic tests were completed, FRAXA premutation was detected (66 CGG repeats) and ovarian stimulation was scheduled in order to preserve oocytes prior to complete ovarian failure. We started a flare-up protocol (GnRH analogue plus 300 IU hMG) from the second day of the menstrual cycle. Results: A serum oestradiol level of 1147 pg/ml was reached on day 10 and four oocytes were retrieved transvaginally under ultrasound-guidance. Three mature oocytes were frozen in liquid nitrogen using the slow-freezing technique. Conclusions: Infertility in women with POI is highly likely and irreversible. Therefore, identifying patients at high risk of POI is crucial to offer them fertility preservation options before the onset of complete ovarian insufficiency. However, a poor ovarian responsiveness to stimulation and the retrieval of just a few mature oocytes is very likely in these patients.

**FC09.03**

**Endometriosis and infertility: pregnancy outcome in different stages of endometriosis during 12 months after laparoscopy**

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Objectives. Endometriosis-associated infertility is scantily treatable and treatment mainly consists of surgical and medical approaches, or combinations of them. Surgical treatment alone or in combination with gonadotropin-releasing hormone (GnRH) treatment remains the most effective treatment for patients with endometriosis after several unsuccessful in vitro fertilisation (IVF) treatments. The objective of this study was to evaluate the pregnancy outcome during 12 months after laparoscopy in patients with different stages of endometriosis. Materials and methods. This retrospective study (2005-2009) was carried out on 181 infertile patients from Elite Clinic. All patients underwent laparoscopic surgery with or without postoperative treatment using GnRH agonists. For statistical analysis all patients were divided into two groups according to severity of endometriosis (ASRM criteria): Group 1 (stage I-II) 121 and Group 2 (stage III-IV) 60 patients. Results. The general pregnancy rate in study groups was 66.3% (66.9% in Group I and (65.0) patients in Group II). 82 (76.6%) of conceived patients become pregnant within 12 months (54 patients in Group 1 and 28 patients in Groups II), 65 (79.3%) of them had received GnRH treatment. 68 (82.9%) of patients conceived on first IVF attempt or spontaneously. 70 patients (85.4%) delivered. Conclusions. Although no statistical difference in pregnancy outcome between patients with various stages of endometriosis was found, pregnancy is generally achieved within 12 months after laparoscopy and either spontaneously or on the first attempt.
The efficacy of Metformin and Clomiphene citrate in induction of ovulation in patients with polycystic ovary syndrome
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Objective: PCOS is characterized by anovulation and hyperandrogenism. The standard therapy is Clomiphene citrate. Using Metformin to induce ovulation is still controversial. If induction of ovulation is ineffective, laparoscopy may be helpful. The aim of the study was to assess the efficacy of Metformin and Clomiphene citrate in induction of ovulation in patients with PCOS. Material and methods: The study included 25 patients diagnosed with PCOS. In group I (n=8) Clomiphene citrate 50-100mg daily from the 5th-9th day of cycle induced ovulation. If ineffective, Metformin 500mg 3 times daily from the 2nd-22nd day of cycle and Clomiphene citrate 50-100mg daily from the 5th-9th day of cycle were used (group II–n=12). If ineffective, laparoscopy was performed (group III–n=5). The following blood serum hormones’ concentrations were evaluated before induction of ovulation: estradiol, FSH, LH, prolactin. LH/FSH ratio were calculated. Results: The longest duration of infertility (3,4years) was in group I. All patients finally got pregnant. Patients from group I required 2 cycles to achieve pregnancy, from group II–3 cycles and from group III–6 cycles. Group II had lower mean values of estradiol 69,4pg/ml comparing to group I and III (89,4vs89,2). The mean serum concentrations of FSH were similar in all groups (6,1vs5,6vs5,9IU/ml). The serum concentrations of LH were the highest in group I (19,9IU/ml) and the lowest in group II (12,0IU/ml), similarly were LH/FSH ratio. Serum concentrations of prolactin were the highest in group II. Conclusion: Using Metformin with Clomiphene citrate gives a chance for successful ovulation without operation.

Efficacy of Myo-Inositol in achievement of a pregnancy in women with ovulatory disorders
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Objectives: The aim of this study was to evaluate the impact of myo-inositol (MYO), an isoform of inositol belonging to the vitamin B complex, in the achievement of spontaneous pregnancy in women with ovulatory disorders. Materials and methods: 81 women with ovulatory disorders were enroled in this study. 36 women were on treatment with MYO 2g twice a day (44,4% ) and 45 women were without it (55,6%). On the arm of MYO, 25 women (69,5%) were on therapy to 4-6 months, and 11 women (30,5) for a shorter period of time. Results: In 6 months, pregnancy occurred in a total of 4 women (11%) in the arm of MYO and in 5 women (11%) in the arm of non-MYO. No pregnancy occurred in women on treatment with MYO for less than 4 months. Conclusion: In this study, MYO administration had no impact on the rate of spontaneous pregnancy in women with ovulatory disorders, compared with women with no-MYO intake. However, this results may be due to a short period of MYO intake, and a larger study may reveal a positive association between MYO and spontaneous pregnancy.

Ozone therapy as a component of complex treatment of tubal peritoneal infertility
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Objectives - to improve the results of surgical reconstruction of uterine tubes patency in patients with tubal peritoneal infertility. Materials and methods. There were examined 110 women with tubal peritoneal infertility. All the patients were done laparoscopic reconstruction of uterine tubes patency. 80 patients that made up the first group in addition to conventional preoperative and post-operation care underwent a course of ozonetherapy. The other 30 patients from the second group were on conventional treatment. The rate of endogenic intoxication was assessed by the content of medium-mass molecules (MMM). The intensity of lipid peroxidation processes (LP) was defined according to the levels of molecular products. Results. Clinical observations showed the post-operative course in both group to have no complications. However MMM and LP analysis revealed some signs of endogenic intoxication. The elevated MMM, levels of
molecular products might have been caused by a surgical stress. Ozone therapy was found to decrease elevated MMM and LP levels. The assessed indices returned to normal one in the second group on the 8th-10th postoperative day. The results received a year after the operation showed that uterine pregnancy was diagnosed in 37% cases while in the control group it occurred in 20% of cases. Conclusion. The use of ozone therapy in a complex pre-operative and post-operation management of patients for correction of tubal sterility can improve the immediate and follow up results. The observed effect is evidently due to normalizing ozone influence on the level of endogenic intoxication and lipid peroxidation condition.

**FC09.07**
The effects of fenugreek extract on reproductive system in female mice

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Fenugreek (*Trigonella foenum*) is a plant in the family Fabaceae that have numerous consumptions in medicine. The aim of this study was investigation of the effect of hydro alcoholic extract of Fenugreek seed on reproductive system of female Balb/C mice. The mices divided to five groups of ten members: control group, placebo and three experimental groups. At first All mice synchronized. The Control group received no drugs, while placebo group received normal saline. The three experimental groups received intrapretoneal injection of 50, 100, 200 mg/kg/2days extract for 20 days. After 10 injection, blood samples were taken from all groups, hormonal measurement, including FSH, LH, progesterone and estradiol were performed by RIA technique. The results are analyzed by SPSS program. Then these groups compared with control group. Ovaries were sectioned and observed by light microscope. The data presented in this study showed significant decrease in the level of LH and FSH, also significant increase the level of estradiol in the whole experimental groups, while the level of progesterone only increased in the experimental groups 2. Results of histological studies of sections showed significant decrease in the folliculogenesis in the three experimental groups. Also significant increase the number of corpus luteum in experimental groups 2. The degeneration of ovary was observed in experimental group 3. According to the results of folliculogenesis the ovary tissue in high dosage that indicates antifertility effect in female mice.

Key words: Fenugreek, LH, FSH, estradiol, progesterone, folliculogenesis, corpus luteum, mice.

**FC09.08**
The poor responder in IVF: is the prognosis always poor?

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Objectives: the aim of this study was to determine prognostic factors and In Vitro Fertilization outcome of poor responders. Materials and methods: 54 cycles from an equal number of women with a poor ovarian response and successful oocyte retrieval. Poor response was defined by the presence of at least one of the following characteristics: age higher or equal than 38 year old, four or fewer oocytes on retrieval in the previous cycle, serum estradiol level less than 500 pg/mL on the day of HCG administration, and serum FSH levels more than 8 IU/L or a previous cycle cancelled because of a poor ovarian response. Results: The fertilization rate was 59.2%. Four oocytes per cycle were retrieved in 54 cycles, in 5 cycles (9.61%) no fertilization was achieved. An embryo transfer was finally performed in 50 out of 54 cycles, the mean number of transferred embryos was 2.2±1.6. Pregnancy rate was 16%. The miscarriage rate was 26% per transfer. Overall, we found significantly higher basal levels of FSH in non pregnant women (10.5±3.2 versus 8.3±3.9 UI/L). The effect of female age on the prognosis in poor responders shows that older poor responders have lower pregnancy rates (p>.001) but a significant higher birth rate compared with younger poor responders. Conclusion: Our data demonstrate that continuation of therapy in poor responders undergoing IVF can be an option despite the low pregnancy rates. The prognosis of these patients is not affected by a poor response and for some of them the outcome can be favorable.
FC10.01
Approaching community determinants for reduction of maternal mortality: communities' best practices in Egypt
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In Egypt, enormous efforts have been made for reducing maternal mortality with focus on the death related avoidable factors and the infrastructure. However, the major challenge involves addressing the delays women face when they need essential obstetric care. Objectives: Providing support and empowerment for pregnant and post partum women through a set of community based interventions aiming at improving community awareness about early warning signs and about provision of first aid through self management for the critical cases and ensuring provision of timely obstetric care to save women’s life. Methodology: A set of community based interventions was conducted during a period of two years starting from March 2010 in some of rural villages of Benisueif and Fayoum governorates (ranked as the second and third poorest governorates in Egypt respectively). The implemented interventions were comprised of four main activities; building the capacity of the formal and the informal health providers on antenatal, natal and post natal care and on first aid management; the second activity was setting indicators for and ensuring quality of antenatal, natal and post natal care in the governmental health facilities. The third activity was production of media and non media materials that were used for dissemination of the messages throughout continuously planned campaigns. The fourth activity: was mobilizing pregnant and post partum women through implementing campaigns and home visits to seek timely referral to hospital. Results and Conclusions: A way out towards reduction of maternal mortality is approaching communities by changing their behaviors.

FC10.02
Spontaneous rupture of a subcapsular liver hematoma in the postpartum period associated with HELLP syndrome and emergency treatment with a carrier-bound fibrin sealant
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Objective: We describe a case of a ruptured Glisson's capsule due to HELLP syndrome and recommend a surgical treatment. Material and Methods: A review of Medline, the Cochrane Database and the Up-To-Date Database was done. Introduction: HELLP syndrome (hemolysis, elevated liver enzymes, low platelets count) is a serious complication of pregnancy with or without eclampsia. This complication has a high mortality and morbidity and can occur during pregnancy or after delivery. Laparotomy must be performed at the first signs of hemodynamic instability. Case Presentation and Result: We describe the case of a 33-year-old Caucasian woman, who underwent a Caesarean section and 17 hours later a laparotomy to treat a ruptured subcapsular liver hematoma due to HELLP syndrome. A laparotomy was performed and a patch sponge with a layer of human coagulation factors (TachoSil®) was used instead of liver packing. The patient left the hospital 4 weeks after surgical intervention. Conclusion: Use of liver packing techniques is highly effective to control bleeding but can result in significant recurrent bleeding when the pack is removed. The use of a carrier-bound fibrin sealant (TachoSil®) on the disrupted liver surface and suture of the Glisson's capsule will not result in rupture of the capsule and liver rebleeding.

FC10.03
Understanding regional differences in maternal mortality: a national case-control study in France
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Objectives: to assess the risk of postpartum maternal death associated with region, and to examine whether the quality of care received by the women who died differed by region. Materials and Methods: A national case-control study with population selected from recent nationwide surveys in France. 328 postpartum maternal deaths from 2001 through 2006 as cases; and a representative sample (n=14,878) of women who
gave birth in 2003 as controls. Risk of postpartum maternal death associated with region (crude and adjusted OR) were calculated with logistic regression, and the quality of care for cases was compared according to region with chi-square or Fisher’s exact tests. Results: After adjustment for maternal age and nationality, the risk of maternal death was higher in Ile-de-France region (aOR1.6; 95% CI: 1.2, 2.0) and the overseas districts (aOR3.5; 95% CI: 2.4, 5.0) than in the rest of continental France group. In both regions, the excess risk of death from haemorrhage, amniotic fluid embolism and hypertensive disorders was significant. In continental France, after further controlling for women’s obstetric characteristics, the risk of maternal death in Ile-de-France remained higher (aOR1.8; 95% CI: 1.3, 2.6). The cases received suboptimal care more frequently in Ile-de-France than in the rest of continental regions (64% versus 43%, p=0.01). Conclusions: Individual determinants do not explain regional differences in postpartum maternal mortality. Our results suggest that quality of care and organization of health services may play a role in the differential risk of maternal death between regions in France.

FC10.04
Oxytocin during labour and risk of severe postpartum haemorrhage: a population-based cohort-nested case-control study
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Objectives: Our objectives were to investigate the independent association between oxytocin exposure during labour and the risk of severe postpartum haemorrhage (PPH) and to explore whether the prophylactic use of oxytocin after birth modifies this association. Materials and Methods: A Population-based cohort nested case-control study was conducted on a cohort of all women with PPH identified in 106 French hospitals during one year in 2004/2006. Participants were women with term singleton vaginal deliveries, after an uncomplicated pregnancy. Cases were 1483 women with severe PPH, defined by peripartum change in haemoglobin ≥4 g/dL or need for blood transfusion. Controls were 1758 women from a random sample of parturients without PPH. The independent association between oxytocin during labour and the risk of severe PPH was studied through two-level multivariable logistic regression modelling. Results: Oxytocin was administered during labour to 73% of cases and 61% of controls [crude OR: 1.7, 95%CI,1.5-2.0]. After adjustment for all potential confounders, oxytocin during labour was associated with a significantly higher risk of severe PPH [adjusted OR: 1.8, 95%CI, 1.3-2.6] in women who did not receive prophylactic oxytocin after delivery; the odds ratio for haemorrhage increased from one to five according to the level of oxytocin exposure. In women who had prophylactic oxytocin after delivery, this association was significant only for the highest exposure categories. Conclusions: Oxytocin during labour appears to be an independent risk factor for severe PPH. Our results emphasize the need for guidelines clarifying the evidence-based indications for this procedure and the minimal useful regimens.

FC10.05
Ultrasound evaluation of scars 6 weeks and 6 months after Cesarean section at primiparous women. Evaluation of morbidity
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Introduction: Cesarean section (CS) is one of the most common operations undertaken worldwide. Since 1970 there is a steady rise in CS and thus increases the number of women with a scar on the uterus. Among the complications of scar on the uterus include uterine rupture, pathologically adherent placentas, pathology of nidation, reduced fertility and recently mentioned irregular cycle and a possible increase in adenomyosis. Scar on the uterus is usually followed by transvaginal sonography (TVS) it is also possible by hysteroscopy and laparoscopy and hysterosalpingography. A niche is a sonographic finding and is defined as an triangular, anechoic area at the presumed site of incision. The presence of uterine wall defect may affect surgical closure technique of the hysterotomy, inflammation, retroversion of uterus. Design: An
observational prospective cohort study. Material and Methods: We follow with TVS uterine scar at primiparous women 6 weeks and 6 months after caesarean section. Evaluate presence and shape of niche, distance from the cervix and uterine fundus, the presence of free fluid and height of the remaining myometrium. We are looking for links between surgical technique (1 or 2 layers suture of hysterotomy), obstetric history, stage of labour, if planned, rippening of cervix, complications in the puerperium, retroversion of uterus, contraception, breastfeeding incidence of keloid scars etc. We evaluate complications such as dysmenorrhea and spotting. Results: The study is currently ongoing.

FC10.06
Labor-related sacral stress fracture, a case report
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Low-back and buttock pain is a common complaint during pregnancy and the postpartum period and is usually attributable to mechanical lesions of the pelvis. Sacral stress fractures are unusual but important causes for low-back and buttock pain and even postpartum radicular pain. To date, only a dozen postpartum sacral stress fractures have been reported in the literature. A 29-year-old woman, 7 days after her first delivery, presented with symptoms of week but persistent low-back and groin pain. The pain started immediately after delivery but was considered of radicular origin. Imaging studies revealed a right sacral stress fracture. Bone mineral density was normal. The patient reported no pelvic, back, or radicular pain during the pregnancy, and had no history of menstrual irregularities, previous fracture, eating disorder, trauma or endocrine or metabolic diseases. No smoking or use of anticoagulation drugs was reported. Her obstetric and labor history showed no other risk factors. Treatment consisted of restricted walking and use of crutches for 2 months, followed by full weight bearing, which resolved nearly all her symptoms. Clinicians should consider sacral fracture as a diagnostic possibility in postpartum and pregnant patients with lower back and/or buttock pain with or without radicular pain. Bone scintigraphy and computed tomography are considered harmful for the fetus. Magnetic resonance imaging, which is more suitable for pregnancy, is more sensitive than bone scintigraphy in revealing stress injuries of the bone. Physical examination and proper radiologic evaluation are the main keys for revealing the pathology.

FC10.07
Brain tumours and pregnancy: experience of a single referral centre
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Objective: To report management and pregnancy outcome in a series of pregnant women with brain tumour from a single referral centre. Materials and methods: We performed a retrospective study from January 2003 to July 2011. We excluded pituitary and vascular tumours. Women were classified according to whether the tumour was diagnosed before or during pregnancy. We studied the type of brain tumour, gestational age at and mode of delivery, as well as the type of analgesia or anaesthesia used. Results: We collected information on 20 pregnancies with a large spectrum of tumour types. 13 (65%) had brain tumour diagnosed prior to pregnancy. Among the 7 (35%) other women, 4 (20%) had a diagnosis in the third trimester. Four women had a medical termination of pregnancy in relation to brain tumour, with one with a diagnosis early in pregnancy. Prematurity occurred once and three times in the group diagnosed before or during pregnancy respectively. 7 (35%) women needed antiepileptic drugs, 5 (25%) corticosteroids, and overall 10 (50%) required no treatment. For the 16 women with an on-going pregnancy, 9 (56%) were allowed to deliver vaginally, including four with pushing contraindication, and 12 (75%) had an epidural analgesia. There were a total of 11 caesarean births. Conclusion: Management of pregnancy for women with brain tumour seems to depend more on histological type, localisation and evolution more than whether the diagnosis is done before or during pregnancy. If pregnancy is continued, obstetrical outcome seems favourable.
Marfan syndrome and pregnancy: obstetric surveillance particularities - case report

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Introduction: The Marfan Syndrome (MFS) is an autosomal dominant condition with a reported incidence of 1 in 3000 to 5000 individuals. There is a wide range of clinical severity associated with MFS. Although the disease has classically ocular, cardiovascular and musculoskeletal involvement, these patients also demonstrate a significant involvement of the lung, skin and central nervous system. Pregnancy is a high-risk period for aortic dissection and rupture for women with MFS. The increased risk may be due to increased arterial wall stress associated with the hypervolemic and hyperdynamic circulatory state and/or hormonal effects on aortic wall composition. There is a high rate of premature deliveries (15%), mainly due to preterm premature rupture of membranes (PPROM) and cervical insufficiency, and a markedly increased combined rate of fetal and neonatal mortality (7%). Case Report: Primigravida of 18 years old with diagnosis of MFS (history of heart surgery), without aortic morphological changes. Unplanned pregnancy, medically monitored from the 23 weeks. Hospitalization by 34 weeks due to PPROM. Vaginal delivery at 38 weeks, with newly born female, 2860g, Apgar score-10/10/10. Conclusions: Women with MFS should receive pregnancy counseling because obstetric complications appear to be increased in these patients. Patients with MFS who have an aortic root diameter that remains <40mm and have no heart failure may proceed with a vaginal delivery if there are no other obstetrical indications for cesarean delivery. A multidisciplinary approach at a center with experience in management of MFS is recommended for all women with MFS who become pregnant.

Audit of outpatient hysteroscopy

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Objectives: To audit the standard of care in outpatient hysteroscopy as set by the RCOG Green Top Guideline 59 - Best Practice in Outpatient Hysteroscopy (April 2011). Materials and Methods: This was a prospective audit of 78 women who underwent outpatient hysteroscopy at Salford Royal Hospital NHS Foundation Trust, UK. The authors contacted patients by telephone to assess analgesia use and complications. Data were analysed using Microsoft Excel. Results: The failure rate of diagnostic hysteroscopy was 21.8% (17/78). The failure rate of operative hysteroscopy was 0% (0/5). Rates of cervical dilatation were 55.2% (21/38) in postmenopausal women and 17.3% in premenopausal women. 71.4% postmenopausal women received local anaesthetic during cervical dilatation. 32% of women required simple analgesia 24-48 hours post procedure. The complication rate of diagnostic hysteroscopy was 8.9%. There was 1 vasovagal requiring treatment with atropine following operative hysteroscopy. There were no uterine perforation or readmissions. Conclusions: The high failure rate of diagnostic hysteroscopy (21.7%) were partly attributed to poor patient selection and equipment issues. There were no serious complications following diagnostic or operative hysteroscopy. Recommendations are being instituted to further improve the outpatient hysteroscopy service. A reaudit is planned in 6 months.

Clinico-pathological assessment of vulval lesions

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Aim: To analyse histological data from vulval biopsies and correlate the diagnosis with the clinical presentation. Method: Patients referred to Gynaecology Outpatients Clinic at Mater Dei Hospital, Malta with an incidental vulval lesion or complaining of vulval pruritus, irritation or mass and were scheduled for vulval biopsy between 1st January 2010 and 31st December 2010 were recruited. Multiple biopsies were taken under local anaesthesia using a disposable 4-mm Stiezel biopsy punch. Results: 100 patients required
vulval biopsy; ages ranged between 26 and 87 years with more than half of the patients aged between 51-70. Most of the patients were referred with a history of vulval pruritus or irritation. Lichen sclerosus was found as the only diagnosis in 47 cases. Squamous cell carcinoma (SCC) was found in nine patients (ages range from 61-82 years), six of whom had associated lichen sclerosus while three had associated vulval intraepithelial neoplasia (VIN) II. Three patients were diagnosed with VINIII while a total of four patients were diagnosed with VINII. Two patients were diagnosed with VINI. Other pathologies included metastatic papillary adenocarcinoma (ovarian primary), psoriasis and candidiasis. Conclusion: Lichen sclerosus is the most common histological diagnosis in vulval biopsies, being a concomitant diagnosis to SCC in two thirds of cases. In view of the associated increased risk of lichen sclerosus to vulval carcinoma, adequate surveillance of patients with lichen sclerosus is of utmost importance.

FC11.03
The possible influence of the medical staff involved in the organized cervical cancer screening over the responsiveness to the centrally issued invitations in Latvia
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Aim of Study: To survey the awareness, motivation and readiness of medical staff to perform activities aimed at increasing the responsiveness to the organized screening invitation letters and improving the effectiveness of the program. Methodology of Study: A descriptive cross-sectional study by an anonymous survey based on a closed questionnaire with 29 questions. Gynecologists were surveyed at a single moment by inviting them to take part during the conference on May, 2011. Preliminary results: 158 questionnaires returned from the distributed 213 questionnaires, comprising 74% responsiveness and which was 32% of 486 gynecologists of Latvia having a valid practice certificate at January 1, 2011. The average age of respondents was 51 year with average work experience of 25–29 years. 87.3% of respondents selected the cytological examination as the screening method. The vaccination against HPV was believed to be useful by 57%. 18.4% did not believe that the screening would be effective enough to decrease the rates of morbidity and mortality from the cervical cancer. Making self-evaluation of their knowledge in cervical cancer issues, 29.7% believed that they had complete knowledge. Preliminary conclusions: The conclusions after the full completion of data analysis will be available to base the decisions on further and required activities to improve the professional background and involvement of gynecologists in the implementation of cervical cancer screening program in Latvia on.

University of Latvia ESF project „Interdisciplinary group of early diagnosis and prevention of tumors” Agreement no.2009/0220/1DP/1.1.1.2.0/09/APIA/VIAA/016 www.vezaizpete.lu.lv; EC, EUROCHIP-III, WP-4 on adherence to cervical cancer screening http://www.tumori.net/eurochip

FC12.01
Congenital anomalies of the uterus: a risk factor for obstetric complications - experience of a differential perinatal support hospital
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Introduction: Congenital anomalies of the uterus are often asymptomatic and therefore unrecognized. They may affect a young woman due to pain at the time of menarche, or a woman's obstetric and/or gynecologic health. The incidence of congenital uterine anomalies is difficult to determine since many women with such anomalies are not diagnosed, especially if they are asymptomatic. Obstetrical complications reported to occur more commonly with uterine anomalies include increased risks of miscarriage, prematurity, intrauterine growth restriction, antepartum and postpartum bleeding, cervical incompetence, abnormal fetal presentation, pregnancy-associated hypertension and cesarean delivery. Objective: To describe the obstetric complications of a population with uterine malformations. Materials and Methods: It has been carried out a retrospective analysis of all cases of uterine malformations referred to the Hospital of Braga. Medical records were consulted. Results: 54 women were identified with uterine malformations: arcuate (n=1),
bicornuate (n=21), didelphys (n=14), unicornuate (n=1) and septate uterus (n=17). The major obstetric complications identified were the preterm delivery (18.5%) – 60% occurred in bicornuate uterus – and spontaneous abortion (44.4%) – 51% occurred in septate uterus. 68 infants – 77.9% with cesarean delivery (breech presentation in 26.4%). 17.6% of infants had birth weight less than 2500g. Conclusions: Bicornuate and septate uterus have more obstetric complications such as preterm delivery and spontaneous abortion and surgical treatment is therefore advisable. Women with uterine malformations should be referred to an obstetric center with experience in the treatment of obstetric complications expected.

FC12.02
If there is place for tranexamic acid in pregnant women who bleed?
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Obstetric haemorrhage is the world’s leading cause of maternal mortality. Vaginal bleeding after midpregnancy is associated with maternal and fetal risks. The objective was to study short-term efficacy and safety of tranexamic acid in vaginal bleeding during pregnancy management. Material and Methods: 27 women with vaginal bleeding between 24 and 36 weeks' gestation were treated with 500 mg of tranexamic acid IV daily. Tranexamic acid was administered 1 day in 15, 2 days in 3, 3 days in 7 and 4 days in 2 women. Duration of treatment was defined by clinical signs of vaginal bleeding. No cases with placenta previa, cervicitis, cervical ectropion, cervical polyps, and cervical cancer, cervical dilatation were included. Although there are no standard diagnostic criteria for placental abruption we considered these cases as small abruption with no haemostatic failure. Corticosteroids were administered to women who have had bleeding at 24 to 34 weeks' gestation. Results: 26 women were discharged from the hospital after a reassuring clinical assessment in a week after admission. No recurrent bleeding in 2 weeks occurred in 25 cases. In two cases with 4-days tranexamic acid prescription emergency caesarean section were done because of acute placenta abruption: in one case on day 7 after admission, in other – in a week after discharge from the department. In both cases healthy pre-term babies were delivered. Conclusion: Tranexamic acid seems to be safe and effective in the management of bleeding during pregnancy. Further investigation is required to confirm these findings.

FC12.03
A case report: placenta previa percreta when placenta was left in situ
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Objective: Placenta percreta is an uncommon life-threatening complication which is caused by thromboplastic invasion into the uterine serosa. Materials and methods: We present a case report of a 33-year-old woman who had priorly had 3 Caesarean sections with 1 viable birth. A complete placenta previa percreta was diagnosed by ultrasound and magnetic resonance imaging during the second trimester. Invasion of the anterior wall of the uterus and involvement of the bladder was diagnosed. Results and conclusion: An elective Cesarean section was performed at 34 weeks of gestation. A fundal incision was performed on the uterus to leave the placenta in the uterus. An infant in good condition with birth weight of 2250 grams was delivered with estimated intraoperative blood loss of 400 ml. Hypogastric artery ligation was performed and B-Lynch compression suture were placed during Cesarean section. Beta-human chorionic gonadotropin levels declined to 0 in 14 weeks. The possible advantage of the conservative method is a smaller risk of intraoperative hemorrhage and of injuries of neighbouring organs. However, the surgeons should be very familiar with the anatomy of pelvic organs.
FC12.04
Pregnancy outcome after illegal induced abortion in Iran
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Background: The pregnancy outcome was studied in 52 women with a history of illegal abortion. Methods: A retrospective study was conducted at general hospital, comparing two populations of women, between January 1st and December 31st 2008. Result: There was a statistically significant increase in the incidences of premature rupture of membranes, premature labor and low birth weight when compared to 53 primigravida as a control group. The perinatal mortality was also significantly higher in the abortion group. Conclusion: These findings indicate that illegal abortion has adverse effects on pregnancy outcome in Iranian women.

FC13.01
Borderline ovarian tumour - a case report
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Ovarian tumors of low malignant potential (also called borderline tumors) are a heterogeneous group of lesions defined histologically by atypical epithelial proliferation without stromal invasion. These tumors account for 10 to 20 percent of ovarian epithelial tumors. The majority of borderline tumors are serous and approximately 75 percent of patients are diagnosed with stage I disease; 25 to 50 percent of tumors are bilateral. Mucinous tumors are the other common cellular type; 90 percent are stage I and fewer than 10 percent are bilateral. The diagnosis of these neoplasms is based on histopathological examination. Frozen section is commonly performed intraoperatively and the information is used to help determine the extent of the surgical procedure. The risk of malignant transformation is unclear. Progression to invasive cancer may represent true transformation, de novo development of an ovarian cancer, or a primary peritoneal cancer. We report a case of Ovarian Papillary Serous Borderline tumour in a 31 year old woman, IG/IP which first clinical findings were a left complex anexial cyst. She had previously performed a right unilateral oophorectomy for a Mature cystic teratoma. On a first aproach a conservative surgery was performed in order to preserve the patients fertility (ovarian cystectomy). A intraoperative frozen section analysis was done and identified an Ovarian Papillary Serous Borderline tumour. After clarification, the patient agreed to complete surgical exploration and restaging procedure on a second operative time. Currently undergoing hormone replacement therapy and clinically free of disease.

FC13.02
Locoregional recurrence after breast cancer surgery: a single institution retrospective study
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Objectives: The aim of this study was to assess the relationship between pathological features and patient’s age in the outcome of a cohort of women treated for DCIS. Materials and Methods: We retrospectively studied 580 patients (included 65 women <40 years) with DCIS who underwent either mastectomy or conservative surgery plus radiotherapy between 1988 and 2006 at our Department. Pathological features were evaluated and associated with patient age. Results: At median follow-up of 7.8 years (range 5-23 years), the local recurrence (LR) rate was 5.8% (34/580). In women <40 years there was a significantly higher LR rate than in the older ones (13.8% versus 4.8% respectively, p<0.001), and a significantly higher invasive LR rate (77.8% versus 36.0% respectively, p<0.005). Young age was not associated with worse histological features but was related with greater probability of large tumors (>40 mm) at diagnosis, probably because of the absence of mammographic screening at that age. There was a significantly lower disease-free survival (DFS) in micropapillary lesions with grade 2-3 versus other patterns with grade 3 (p<0.001). We observed that recurrence rate was 4.5% in patients with disease-free margins versus 10.9% in patients with close margins (<1 mm) (p<0.001). Conclusions: DCIS in women aged <40 years is a heterogeneous disease without more aggressive pathologic features than in older women, but with higher
risk of LR. The nature of this association has not been established. Micropapillary pattern and margin status after surgery are also related to an increased risk of LR.

**FC13.03**

**Adenoid cystic carcinoma of the breast: case report**

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Objectives: Adenoid cystic carcinoma (ACC) of the breast is a rare breast cancer comprising less than 0.1% of all breast malignancies. The authors describe the only case of breast ACC diagnosed in our Breast Center in the last 30 years.

Material and Methods: A 62-year-old woman presented with a painful, non well-circumsribed palpable mass located in the upper outer quadrant of the right breast. Mammography showed a lobulated mass with unsharp margins and ultrasonography confirmed an ill-defined hypoechoic solid irregular mass measuring 16 mm in that quadrant. Ultrasoundguided core biopsy was performed. Histopathological evaluation diagnosed a grade I invasive ACC without vascular, perineural and venous invasion. The patient underwent breast-conservative surgery with sentinel axillary lymph node biopsy.

Results: Histopathology of the resected specimen confirmed the presence of a 11mm tumor with histological features of ACC, free margins and negative lymph node metastases. Immunohistochemistry for estrogen and progesterone receptors and Her2 gene amplification was negative. The patient was proposed to adjuvant radiotherapy and remains well to date.

Conclusions: The best treatment of ACC is controversial due large variations in the patterns of practice along the years and the low frequency of this tumor. Recent studies recommend breast-conserving treatment including postoperative radiotherapy for small tumors. The value of adjuvant systemic and targeted therapies is not well established. Late relapses can occur, so long-term follow-up is mandatory for these patients. Despite its triple-negative status, ACC of the breast has a favorable prognosis so an accurate diagnosis and appropriate treatment are therefore important.

**FC13.04**

**Adenomyoepithelioma of the breast: a case report and review of literature**


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Introduction: Adenomyoepitheliomas (AME) of the breast are very rare and form a heterogeneous tumoral group, in terms of their morphology and biological behavior. They are characterized by biphasic proliferation of both epithelial and myoepithelial cells. AME should be considered in the differential diagnosis of a focal breast solid lesion. Most of these tumors are benign, but malignant change of one or both cellular components may occur, and larger malignant tumors appear to be associated with hematogenous metastasis. Case report: An asymptomatic 47-year-old woman was referred to our Hospital for further investigation with a screen-detected abnormality. Mammography showed a lobulated mass above the right nipple. Clinical examination was otherwise unremarkable, with no evidence of associated lymphadenopathy. After the clinical evaluation, the patient underwent an ultrasonography. Imaging showed benign features with the lesion appearing circumscribed and having no associated parenchymal distortion. Fine-needle aspiration biopsy was undertaken, which revealed benign Adenomyoepithelioma. A total excision of the lesion with a margin of uninvolved breast tissue was performed. The patient's postoperative course is uneventful.

Conclusions: Benign AME may show suspicious malignant imaging features, the use of tissue biopsy and surgical excision should therefore be essential. A benign or malignant AME may recur locally, even several years after an initial surgical excision. The best predictor for local recurrence of a benign AME is an initial incomplete or narrow excision margin. If the excision margin is narrow or incomplete, reexcision to gain adequate margins is recommended.
Pelvic actinomycosis with bilateral hydronephrosis and renal failure associated with prolonged intrauterine contraceptive device use - a case report
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A 43 year old multiparous woman presented with left lower abdominal pains and lower abdominal swelling of 11 months duration. She had mirena coil in situ for fifteen years. On examination, she was afebrile. Her abdomen was soft, non tender with a fixed left iliac fossa mass arising from pelvis. Blood investigations showed haemoglobin of 8.4g/dl and leucocytosis of 16500/mm3. Her creatinine level was 138umol/l and urea 4.7mmol/l. Liver profile and tumour markers including Ca125 and CEA were normal. Abdominopelvic CT and MRI suggested huge complex pelvic adnexal mass, bilateral hydronephrosis and paraaortic lymphadenopathy with an IUCD in situ. The mass was biopied under ultrasound guidance and sample sent for histology. Bilateral ureteric stents were inserted to relieve the hydrenephrosis. Histology result confirmed actinomyces infection and she was commenced on intravenous benzylpenicillin for six weeks and had the IUCD removed. Despite stenting, her renal function deteriorated with serum creatinine rising to 412umol/l, urea 13.8 and Hb 5.8. She had been on non-steroidal analgesia and this was discontinued. Isotope renogram performed showed right ureteric obstruction with a suspicion of right stent blockage. However cystogram showed bladder not distending with retrograde flow into ureter. A urinary catheter was passed for bladder drainage and a week later her creatinine had dropped to 156umol/l and catheter was removed two weeks later. She was discharged on oral amoxicillin. Latest CT and MRI Scan confirmed complete resolution of the mass.

Evaluation of women with hirsutism in dermatology clinic in Sanandaj in a 2-year period
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Introduction: Determination of the causes of hirsutism in hirsute patients who referred to dermatologic clinic in sanandaj from 2003 till the end of 2004. Hirsutism is the growth of coarse terminal hair in a male pattern distribution in females. Method: This is a cross sectional study comprising 180 hirsute patients in sanandaj (2003-2004). The method of sampling was census and the data were collected by use of questionnaires. The patients were interviewed and examined. Relevant tests and sonography of ovaries were requested. The data collected, were analyzed by means of spss and chi square tests. Results: Menstrual irregularities, acne vulgaris, family history of hirsutism and hair loss were detected in 36/1% 37/7% 47/8% and 26/7% of the patients, respectively. Regarding Para clinical Test high serum levels of testosterone prolactin DHEA-SO4 were detected in 15% 6% 11% respectively and 3% of patients had high urine level of cortisol. 62/7% of patients had mild hirsutism chin was the most common site of involvement (47/7%). No significant relationship between the age of the patients and severity of hirsutism was observed. Conclusion: It has been stated that polycystic ovary syndrome is the most common cause of hirsutism but in our study most patients had the idiopathic type of disease. Therefore factors such as genetics, nutrition, and inappropriate use of medicines and lack of suitable diagnostic facilities may be regarded as possible explanations for the results of this study.

Vaginal leiomyosarcoma – an interesting surgical technique and an unusual histological finding
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We report a 39 year old woman who presented with dysmenorrhoea, menorrhagia, dyspareunia and a vaginal mass. On clinical examination, a 6cm mass was found arising from the anterior wall of the vagina. It was suspected to be a fibroid, and ultrasound scanning supported this diagnosis. A vaginal route myomectomy was performed, by enucleating the fibroid via a vaginal incision. The large size of the tumour
and the histopathology findings (a high rate of mitoses, areas of necrosis and cellular atypia) allowed a diagnosis of leiomyosarcoma to be made. The patient underwent hysterectomy and removal of the upper vagina, followed by radiotherapy. We present macroscopic photographs demonstrating the operation and the mass, and histological images demonstrating the cardinal features of this rare tumour. There have been very few reported cases of primary vaginal leiomyosarcoma. Ahram et al (2006) recorded 137 published over 40 years. Another literature review (Ciaravino et al, 2000) demonstrated an overall five-year survival of 43% across 66 reported cases. We have reported this case to add to the limited body of case data for vaginal leiomyosarcoma. We also wish to emphasise that vaginal myomectomy is an appropriate surgical route for selected fibroids. Finally, it should be noted that leiomyosarcoma is a rare but important differential diagnosis of uterine fibroids, and should be borne in mind with any myomectomy – hence the importance of histological analysis of any suspected fibroid. Prompt diagnosis and referral for further investigation allows for timely treatment of these aggressive tumours.

FC14.04
An unlikely site for calciphylaxis - a case report
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We report the first documented case of vulval calciphylaxis. An 83yr old lady presented with a 2 week history of rapidly progressing painless vulval lesion. The 5cm lesion on the right vulva was excised and the histological result diagnosed calciphylaxis - a systemic calcification of the tunica media in the arteries, which subsequently results in vascular thrombosis and tissue ischemia. Further biochemical results showed a mild hypercalcaemia and raised parathyroid hormone, secondary to an untreated parathyroid adenoma. It was this hypercalcaemia that was the probable cause of the condition. On surgical excision of the lesion and medical treatment of the hypercalcaemia, there where no further recurrences or de novo lesion formation. Calciphylaxis most commonly affects patients with end stage renal failure, and presents with multiple lesions over limbs, trunks and abdomen. Other lesions described in the literature where on the buttocks and also on the penis – no lesions on the vulva were mentioned. The case under review adds a new differential diagnosis to necrotic vulval lesions, other than malignancy.

FC14.05
Assessing and comparing pain experienced directly after insertion of the levonorgestrel- releasing intrauterine system
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Aim: To evaluate, by means of a validated pain scoring system, the pain experienced after the insertion of the LNG-IUS device. Furthermore, analysis of the pain scores obtained with respect to different modes of peri-operative analgesia and/or anesthesia employed during the insertion procedure were assessed. Method: The study includes a group of 262 women who had the LNG -IUS insertion done in Mater Dei Hospital Malta during the year 2011. A validated pain scoring system was employed to assess the pain experienced directly post-procedure. Other interventions performed at the time of insertion of the LNG-IUS were also taken into account. Correlation was carried out between the modes of analgesia/ anesthesia used and the post-operative pain scores. Results: 170 patients had the procedure done under general anesthesia, 26 under cervical block, 2 patients were done under light sedation. Out of the 262 patients, 64 were not given any form of analgesia/or anesthesia. The latter had the highest pain scores and needed post operative non-steroidal anti-inflammatory drugs. The patients with cervical block had the least pain scores. The patients who had other interventions, such as hysteroscopy, had a high pain score and needed non-steroidal analgesia. Conclusions: This study is a good indication of overall patient satisfaction post LNG-IUS procedure. In view of the pain scores obtained, the study indicates that regular analgesia should be administered preoperatively prior to LNG-IUS insertion. Despite considered as a minor outpatient procedure, LNG-IUS is not a painless procedure. Pain control is optimized prior to its insertion.
FC14.06
Haemostatic bandage for the control of haemostasis after stripping of endometriotic cysts
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Introduction: Endometriosis is the presence of endometrial glands and stroma outside of the normal location. Ovarian endometriomas are a common manifestation of endometriosis. Laparoscopic excision of the cyst is considered the best treatment because it has a lower recurrence rate and improves fertility. The electrosurgical coagulation of the ovarian surface after excision of the cyst can damage the ovarian parenchyma with consequent loss of the ovarian follicular pool. Materials and methods: We present the case of a woman of 24 years with a history of intermittent pelvic pain which was accentuated during the menstrual period and a vague discomfort during sexual intercourse. The pelvic examination revealed a pelvic mass in the right adnexal site. Laparoscopy confirmed the presence of an endometrioma, that was enucleated by stripping. The bleeding of the ovarian surface was checked with apposition of a haemostatic bandage impregnated with human fibrinogen and thrombin. Results: The patient did not report surgical complications and was discharged the day after. Conclusions: The key point in the removal of the ovarian endometrioma is the ability of preserving patient’s fertility. The most common technique is the laparoscopic enucleation by stripping. After remove of the cystic capsule there is the control of haemostasis of the ovarian surface by electrocoagulation with bipolar current. The electrocoagulation provides an adequate control of bleeding but it causes the destruction of ovarian follicles. This case reports a total control of the haemostasis of the ovarian surface without any thermal damage and with preservation of ovarian follicular pool.

FC14.07
Conservative management of ovarian torsion
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Objectives: Current recommendations of ovarian torsion management strongly support ovarian conservation. Furthermore torsion of normal adnexa is rare and involves steadily increasing congestion and ischaemia of the ovary. Materials and Methods: We present a case report of a 14 year old girl, 1 year post menarche, who was referred to our department with a 3 day history of left sided abdominal pain. An ultrasound examination revealed an enlarged left ovary measuring approximately 7cm by 5cm with absent Doppler flow. Left sided hydronephrosis was also noted. This lady underwent an emergency laparatomy the following day. Operative findings included a torted, enlarged and oedematous left ovary containing viable looking ovarian tissue. There were no ovarian cysts or tumours. Detorsion of the affected ovary was carried out. Results: This patient had an uneventful recovery with a subsequent ultrasound scan revealing a healthy 3.5 cm by 2.7cm left ovary. Conclusion: Although uncommon, ovarian torsion may still occur in the absence of enlarging lesions such as tumours or cysts. Surgical management of ovarian torsion should attempt to salvage the affected ovary. To maximize the potential success of conservative therapy, torsion must always be included in the differential diagnosis of abdominal pain.

FC14.08
Genital bloodflow in a female rat model for neuropraxia associated with nerve-sparing radical hysterectomy
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Objectives: Radical hysterectomy (RH) is associated with sexual dysfunctions. Nerve-sparing RH (NSRH) may improve this morbidity. Preclinical models in this field are not available. Our aim was to establish
models for NSRH in female rats. Materials and Methods: After ethical permission, female Sprague Dawley rats (250g) were subjected to unilateral pelvic nerve crush (PNC; n=10) or crush of the PN and nerves from the major pelvic ganglion supplying vagina and bladder (clock-nerve crush; CNC; n=10). Mean arterial blood pressure (MAP) was monitored. Clitoral and vaginal bloodflows were registered, via laser Doppler (tissue perfusion units; TPU), during PN stimulation (5V; 20Hz) at 3 and 10 days after crush. Immunohistochemistry for clitoral and vaginal collagen III and nitric oxide synthase (NOS) nerve content after bilateral PNC was performed. Results: Control stimulations of the intact PN at 3 and 10 days caused vaginal peak flows of 0.22±0.06 and 0.13±0.02 for PNC and 0.24±0.08 and 0.12±0.03 (TPU/MAP) for CNC. Stimulation of the PNC or CNC side yielded lower vaginal peak flows (p<0.05) of 0.10±0.03 and 0.04±0.002 for PNC and 0.10±0.04 and 0.04±0.02 (TPU/MAP) for CNC. A similar reduction occurred at 3 and 10 days for clitoral flow. Collagen III content was higher in vaginal and clitoral tissue after PNC than sham operated rats (p<0.05). NOS nerves expression was higher in the sham group (p<0.05). Conclusions: PNC and CNC cause similar effects on genital function and are proposed for the study of NSRH. This will forward understanding of etiologies and therapies for associated genital dysfunctions.

**FC14.09**

**Long-term well-being after surgical or conservative treatment of severe vulvar vestibulitis**

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Objectives: To compare long-term well-being of women who needed surgery or did not need surgery in the treatment of severe vulvar vestibulitis syndrome. We also attempted to identify factors explaining differences in the treatment response. Material and methods: An observational case-control study of sixty-six women diagnosed with severe vulvar vestibulitis and treated initially by conservative management during 1994 – 2005. Thirty-nine patients did not respond and underwent posterior vestibulectomy (surgery group) and 27 were managed without surgery (conservative treatment group). Baseline patient characteristics, degree of dyspareunia, and details of management were collected from hospital charts. At the follow-up visit current dyspareunia, sexual well-being, somatic and mental health, and social support were analyzed and vestibular tenderness was measured. The main outcome measures were visual analogue scale (VAS) for dyspareunia, sexual well-being, vestibular tenderness, and overall patient satisfaction. Results: Dyspareunia decreased significantly in both groups. VAS decreased 66.7% in the surgery group and 78.1% in the conservative treatment group, (p=0.407). Posterior swab-touch test was negative more frequently after vestibulectomy. Long-term sexual well-being did not differ between the two groups. Overall, 89% of the patients in both groups were satisfied with the treatment. Patients with atopic skin problems were less likely to need surgery (OR 0.2; CI95% 0.1 – 0.7). Conclusion: Patients with severe vulvar vestibulitis syndrome who do not respond to conservative management achieve good long-term well-being and decrease of dyspareunia by posterior vestibulectomy. The response is comparable to that achieved by conservative management among patients who do not need surgery.

**FC14.10**

**Exposure of disease modifying drugs- case control study among Hungarian women with multiple sclerosis**

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Background: The incidence of disease-modifying treatment (DMT) exposure during pregnancy and puerperium in multiple sclerosis (MS) is still unknown worldwide, also in Hungary. Objective: In our case-control study we examined the incidence and effect of in utero DMT exposure on fetal and perinatal outcomes. The secondary aim was to compare the obstetrical and neonatal outcomes in our survey population with age-matched healthy control. Material and methods: A retrospective analysis of pregnancy
and neonatal data from MS patients, who became pregnant during their disease, was carried out in comparison with international findings. Results: 75 MS mothers: the average age at childbirth was 29, 15(±5,13) in primiparas and 25,18(±3,88) in multiparas. The permanent disability in these patients measured though Kurtzke’s Expanded Disability Status Scale (EDSS). At the beginning of the pregnancy the EDSS score was 1.38(±1.4) and relapse rate was 1.37(±1.3) before the antepartum period. Exposure to MS drugs during pregnancy was 67,64%. The spontaneous miscarriage rate and intrauterine exits were significantly higher among these MS patients than among the age-matched healthy controls (p<0,05). Conclusion: Our results confirm that, in contrast with international data, the relapse rate did not significantly decrease during pregnancy and increase after delivery. The significantly increased risk of spontaneous miscarriages and intrauterine exits could not be considered independent beta-interferon use. One-Way ANOVA did not reveal a significant correlation between any MS drug exposure and an unfavourable obstetric outcome.

FC15.01
Safety and efficacy of outpatient versus inpatient induction of labour using intravaginal sustained-release prostaglandin-E2 (Propess®)
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Introduction: Despite offering potential for a more cost-effective method for induction of labour, the evidence supporting the safety of outpatient induction is lacking. This study compared the safety and effectiveness of outpatient versus inpatient induction using 10mg PGE2-SR. Methods: We enrolled 68 women with low-risk singleton cephalic presentation ≥10 days post-term, between June 2010 - June 2011. After insertion of PGE2-SR and 30 minutes of monitoring, women with a supportive home environment, access to a telephone and mode of transport were offered the option to continue induction of labour as outpatient. These women were instructed to return to hospital if the PGE2-SR fell out, if they experienced painful and regular contractions, SROM or vaginal bleeding or if not already in labour after 24 hours. Women in the inpatient group were chosen based on a match for parity and ethnicity. Results: The 34 women in each group were matched for age (Inpatient mean 28.6 and outpatient mean 25, p = 0.0038). Bishop's score at insertion of PGE2-SR was 3 in outpatient and 2.34 in the inpatient group (p = 0.088). The number of women in labour within 24 hours was 21 (62%) in the outpatient group and 20 (59%) in the inpatient group (p = 0.804). There were no significant difference between the incidence of PGE2-SR falling out, incidence of hyperstimulation, 0.06% and 0.03% (p = 0.5), need for caesarean section, 47% and 38% (p = 0.5), admission to neonatal intensive care unit 0.06% and 0% (p = 0.2) or maternal PPH, 0.09% and 0.09% in the outpatient and inpatient groups respectively. Conclusions: This study suggests that there is no difference in outcome when comparing outpatient induction of labour using PGE2-SR to inpatient induction. Outpatient PGE2-SR is a safe alternative to inpatient induction in a carefully selected low-risk population.

FC15.02
Principles of the therapy of placental insufficiency for correction of disturbances the fetal renal hemodynamics
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The complex dynamic inspection of 158 pregnant women in terms from 24 till 41 weeks of gestation was carried out for an estimation of efficiency of the therapy of placental insufficiency(PI)with the aim of the correction of disturbances the fetal renal hemodynamics. 50 women with uncomplicated pregnancy have been included in control group. The basic group comprised 108 women whose pregnancy was complicated by PI and fetal growth retardation syndrome. Our research included fetometry, placentography, evaluation of quantity and quality of amniotic fluid, measurement of the fetal kidneys, Doppler study of uteroplacental, fetoplacental, arterial and venous blood flow. Examination performed by standard methods. The indexes of blood flow in main renal arteries of the fetus and arteries of the renal parenchyma were studied. The compensated form of PI was revealed in 52 (48,15%), subcompensated -in 48(44,44%),decompensated -in 8 (7,41%) observations. Researches have shown, that complex therapy of PI using antiaggregants (Dipiridamol) and drugs which improve metabolism at the cell-membrane level (Actovegin) in
compensated PI resulted in adequate improvement of fetometric indexes and normalization of hemodynamics, including a renal blood flow of a fetus, in 88.5% of cases. In subcompensated PI the indexes of fetometry and renal blood flow of the fetus stabilized or normalized in 41.8% of cases. In decompensated PI stabilization of fetal hemodynamics was obtained in 62.5% of cases, which permitted, due to normal indexes of venous blood flow of the fetus, to prolong gestation for 7-10 days, to improve the perinatal outcomes.

FC15.03
Piogenic granuloma of pregnancy – the purpose of a clinical case
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Objective: to review, from a clinical case, the diagnosis and treatment of the rare piogenic granulomas of the hand. Material and methods: patient’s clinical profile was retrospectively analysed and some clinical data from papers were reviewed. Results: the authors describe the clinical case of an invulgar granuloma gravidarum localized in the anterior surface of annular finger, without any history of trauma or infection. Antibiotic therapy was initially instituted in the last weeks of pregnancy, without improvement. The lesion was removed surgically after some weeks because it stayed unresolved and the diagnosis was histologically confirmed. Conclusions: the maternal skin and related structures, including hair, nails, and mucosa, undergo numerous changes during pregnancy and the puerperium. Some changes are pathological while others are not. Vascular tumor-like structures may develop or enlarge during pregnancy. Pyogenic granulomas (granuloma gravidarum, pregnancy tumor, pregnancy epulis) are exophytic, reddish purple papules made up of granulation tissue. They tend to begin in the first half of pregnancy, most commonly on the anterior mandibular or maxillary gingiva, but also on fingers, and then partially regress postpartum. The time to regression is unclear, but can take weeks to months. In this case it was necessary to remove the lesion surgically as it did not disappear after 15 weeks.


FC15.04
Acute fatty liver of pregnancy - case report
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Objectives: Description of case report and summary of the knowledge about acute fatty liver of pregnancy to point out the importance of the early diagnosis of this disease. Material and Methods: retrospective revision of the patient’s clinical profile. Results: A 30-year-old woman, gravida 1, para 0, presented at 36 weeks' gestation with nausea, vomiting, malaise, and moderately elevated liver transaminase levels. The differential diagnoses included acute fatty liver of pregnancy, HELLP syndrome, viral gastroenteritis and cholelithiasis. Fetal demise was diagnosed by ecography and labour was induced. After delivery she was admitted at the intensive care unit with disseminated intravascular coagulation (DIC).Posterior investigation confirmed acute fatty liver of pregnancy. The woman rapidly improved few days after delivery. Conclusion: Acute fatty liver of pregnancy is a rare, potential fatal disease that occurs in third trimester or early postpartum period. Due to high maternal and perinatal mortality, early diagnosis, prompt delivery and supportive care are required.
Art therapy for reduction of depression and anxiety symptoms in pregnant women.

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Objectives. WHO data shows that anxiety and depression in pregnancy period leaves damaging impact on foetus/newborn (growth retardation) and can cause succession of pregnancy and delivery complications. Untreated depression and anxiety during pregnancy is the main cause of postpartum depression. The goal of the study is to verify, whether the art therapy reduces depression and anxiety symptoms in pregnant women. 

Matherials and methods. For selection of participants a pre-investigation questionnaire was used with a partly structured interview and document analysis. Selection comprised 64 patients (the study group n=32 and the control group n=32) aged 20 to 35 years, being in the 12th to 28th week of pregnancy, having mild and moderately severe symptoms of depression, as well as symptoms of anxiety. Sample size at the end of the study comprised 60 patients (the study group n=30 and the control group n=30). Treatment group participated in art therapy (13 sessions). For the investigation of depression and anxiety symptoms, the anxiety self-assessment questionnaire (STAI Form Y-1) and Beck depression questionnaire II (BDAlI) were used. Results. The obtained study results confirmed the study hypothesis: depression and anxiety symptoms in pregnant women statistically significantly decrease after the art therapy sessions. The sustainability of results remained for about a month after the art therapy. Conclusions. The Art therapy during pregnancy period helps to solve emotional difficulties, decrease anxiety, depression and fear of delivery, diminishing delivery and postpartum complications, wherewith it would be wholesome to be suggested as new effective therapeutic method for pregnant women.
Birth Registry and analysed by routine statistical methods. Results Induction of labour by use of vaginal prostaglandins rose from 6.5% in 2001 to 11.4% in 2010 for primipara and from 6.1% to 8.9% for multipara, by artificial rupture of membranes dropped from 37.2% to 32.9% for primipara and from 36.8% to 31.9% for multipara, and by use of oxytocin dropped from 48.5% to 43.1% for primipara and rose from 11.2 to 12.9% for multipara. Planned cesarean section (CS) occurred among 4.6% primipara both in 2001 and in 2010, elective CS among primipara occurred in 13.0% in 2001 and in 17.9% in 2010. 24.8% of women with previous CS delivered vaginally during later deliveries in 2001, in 2010 the proportion was 26.5%. Proportion of multiple births following IVF rose from 15.4% to 32.3%. The percentage of babies with birth weight less than 1500 grams among multiple births rose from 16.2% to 20.0%. Proportion of women having episiotomies dropped from 21.0% to 10.5%. Percentage of women delivered with vacuum rose from 2.3% to 4.9% and with forceps stayed 0.04% over the period. Proportion of women experiencing third or fourth degree perineal tear rose from 0.49% to 0.74%. Conclusions EBCOG standards of care allow to monitor the quality of health care and to make health policy decisions, if needed.

**FC15.08**

**Pregnancy and schizoaffective disorder**

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Objectives: Pregnant patients with mental illness require specific psychiatric and obstetric treatment. Women with chronic mental health disorders are at increased risk of poor obstetric outcomes. There is no clear evidence on the safety of psychotropic medicines in pregnancy. Psychiatric disorders were identified as leading cause of indirect maternal death. Evidences suggest that the care of mental health along with physical care in pregnant woman must be ensured. Materials and Methods: This is a case report of a patient with history of schizoaffective disorder. She attended perinatal mental health clinic (PNMH) at Barking, Havering and Redbridge (BHR) University Hospitals NHS Trust, Essex, UK. We collected the data from the online record and case notes review. Results: A 22 year old patient conceived spontaneously while on quetiapine and citalopram. She had onset of psychotic symptoms when she was 14 years old. Her medicines were changed from risperidone depot injection to oral quetiapine at patient’s request. Her random blood sugar was normal. She developed obstetric cholestasis. She had normal vaginal delivery at 36 weeks and 2 days of gestation. She delivered a male baby with birth weight 2.79 kilos. The apgar scores at 1, 5 and 10 minutes were 9, 10, and 10. The patient showed signs of relapse during post natal period. She is under the follow up of psychiatric team. Conclusion: The patient with severe mental illness requires a multidisciplinary approach and joint obstetrics and psychiatric clinic ensured good attendance rates, low hospital admission rates and reduction in the frequency of polypharmacotherapy.

**FC15.09**

**Maternal immune thrombocytopenia**

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Introduction: Maternal thrombocytopenia increases the risk of maternal bleeding and fetal intracranial haemorrhage. Case Report: A 29 year old lady primagravida presented with asymptomatic thrombocytopenia at booking. She had no relevant medical history and no episodes of bleeding during pregnancy. Serial platelet count was done; following are the results: 95x109/L, 106x109/L, 39x109/L, 30x109/L. The hematologist was consulted and she was started on steroids. Platelet count is to be monitored every 2 weeks and management plan is discussed in the event of a bleeding episode and for delivery. The pediatricians will be notified postpartum so that neonatal platelet counts can be monitored closely. No maternal laboratory parameter can be done antenatal to help predict the platelet count in the fetus. Conclusion: In cases of maternal immune thrombocytopenia, maternal platelet count should be strictly monitored antenatally and postnatally. The neonate should be followed by platelet counts and cerebral ultrasound. It is essential to have multidisciplinary care in such cases between the obstetrician, haematologist and paediatrician to provide the best care for the mother and the neonate.
Study of relationship between prenatal care and demographic characteristics of pregnant women
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Introduction: During the past 20 years, new technology has been introduced to assess the fetus ante partum, including electronic fetal monitoring, sonography, and amniocentesis, with the fetus emerging as a patient in utero. Prevention of morbidity as well as mortality is now the goal. The goal of prenatal care is to help the mother maintain her well-being and achieve a healthy outcome for herself and her infant.

Materials and Methods: This research was a descriptive and analytical study. The research community includes pregnant women referred to some center. The data collecting was based on goals and easy method. The questionnaires were filled out through interview and analyzed using the statistical software spss win.

Results: The obtained results showed that most of the units under study (high school) 32.8%, homemaker 95.5% under 18 years married 43.3%. The most referred were the trimester 1. There was a significant statistical relationship between age married, age less 35 years, level of educational husbands with prenatal care.

Discussion: Women’s during pregnancy had been difficulties such as nausea and vomiting, burning, constipation, back pain, increase vaginal secretion. Efficacy of prenatal care also depends on the quality of care provided by the caretaker.

Persistent trophoblastic disease following Hydatidiform mole
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Objectives: The risk of partial hydatidiform mole (PHM) requiring chemotherapy for persistent gestational trophoblastic disease (GTD) is 1/200, compared with 1/12 after a complete hydatidiform mole (CHM). The aim of this study is to determine demographic characteristics, clinical course and response to chemotherapy in persistent trophoblast disease after hydatidiform mole.

Materials and methods: Retrospective study of all cases with proven histological diagnosis of hydatidiform mole from 1991 to 2011, in our Hospital. We performed a descriptive analysis [age, maternal blood type, gestational age, human chorionic gonadotropin (hCG) levels and Obstetric outcomes] of all patients with persistent GTD. Results: 60 cases were analyzed (11.7% CHM, 88.3% PHM). 3 PHM and 1 CHM had persistent GTD (plateau hCG levels over three weeks) requiring chemotherapy [3 with single-agent (methotrexate) and 1 with multiagent for refractory disease]. Median maternal age was 28 years, median gestational age was 8 weeks and 75% were nulliparous. Vaginal bleeding was the most common manifestation at diagnosis. All had hCG levels over 100,000 mIU/mL before evacuation and a significant uterine enlargement. All patients maintained a complete biochemical remission after chemotherapy. Overall survival was 100% at five years. Conclusions: Diagnosis of persistent GTD is typically made with persistently elevated serum hCG following a molar pregnancy. As a group, GTD are exquisitely sensitive to chemotherapy, and represent one cancer for which single-agent therapy is still in use. After achieving remission, patients can generally expect normal fertility in the future, but pregnancy should be avoided for at least one year following treatment.

Synchronous primary ovarian and endometrial cancers - a case report
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The occurrence of synchronous primary ovarian and endometrial cancers is relatively uncommon, but it is important in clinical practice because a diagnosis of synchronous malignancies would affect clinical management and prognosis. Endometrial and adnexa malignancy may coexist in approximately 5% of all patients with endometrial cancer and 10% of those with ovarian cancer. Risk factors for synchronous cancers include younger age, obesity, premenopausal status, and nulliparity, which suggest a hormonal field effect. Treatment is based upon the combined treatment recommendations for each cancer according to stage. We report a case of synchronous primary ovarian and endometrial cancers in a 77-year-old woman,
IIG/IIP which first clinical finding was abnormal vaginal uterine bleeding. On physical examination it was found a solid, irregular, fixed pelvic mass; the cervix was dilated and an endometrial biopsy was performed. An endometrioid adenocarcinoma was diagnosed. The abdominopelvic CT reported a large complex right adnexal mass lesion arising from the ovary and extending across the midline with 18x12 cm and multiple peritoneal implants. The serum CA 125 was elevated (>600). Exploratory laparotomy with total abdominal hysterectomy with bilateral salpingoophorectomy was done. The diffuse metastatic pelvic and abdominal disease did not allow the surgery to be completed, so It was residual disease in bladder (>1cm) and colon. Histopathology of the ovarian mass revealed features of stage III (FIGO) mucinous cystadenocarcinoma, sections from the endometrium revealed features of grade II (FIGO) endometrioid carcinoma with infiltration into myometrium. There was no medical conditions to neodjuvant treatment.

**FC16.03**
**Prevention of lymphocele in patients treated for ovarian cancer**
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Introduction: Lymphadenectomy is associated to intra- and postoperative complications. The most frequently postoperative complication of pelvic and para-aortic lymphadenectomy is the development of lymphocele. The aim of this retrospective study is to evaluate the efficacy of the collagen patch coated with the human coagulation factors to prevent lymphocele in patients underwent to pelvic and para-aortic lymphadenectomy for ovarian cancer. Material and method: Seventy-nine patients were evaluated: in 36 patients was applied a collagen patch coated with the human coagulation factors during standard surgical procedure (Group A), 43 patients underwent only to standard surgical procedure (Group B). The main outcomes were: lymphoceles rate, drainage volume, drainage removal, reintervention for lymphocele.

Results: Between the groups there were not significant difference in term of number of excised lymph nodes, presence of lymph node metastases, pre-/postoperative radiotherapy and prophylaxis with heparin. Lymphocele rate was significantly lower in group A (16.6% vs. 32.5% p<0.05 in groups A e B, respectively). Moreover, in group A, the volume of lymph drained was significantly lower (65 ± 28 vs. 140 ± 45 ml, p <0.05 in groups A and B, respectively), as significantly fewer were hospital days (3±0.5 vs. 5±0.9 days; p<0.05 in groups A e B, respectively). reintervention for lymphocele was required in only 1 patient in group A and in 3 patients in group B (2.7% vs 6.9% p = NS in groups A and B, respectively). Conclusion: Intraoperative application of a collagen patch coated with the human coagulation factors reduced rate of postoperative lymphocele.

**FC16.04**
**Endometrial serous tumour - a case report**
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Women have a 2.5 percent lifetime risk of developing endometrial cancer, which accounts for 6 percent of all cancers in women. Fortunately, most cases are diagnosed at an early stage when surgery alone may be adequate for cure. Five-year survival rates for localized, regional, and metastatic disease are 96, 67, and 17 percent, respectively. The uterine papillary serous (UPSC) and clear cell types of endometrial cancer are referred to as type II tumors. Papillary serous and clear cell carcinomas are highly aggressive tumors that commonly present at a more advanced stage. Myometrial invasion is prominent and vascular invasion commonly occurs. These subtypes account for 1 to 5 and 5 to 10 percent of endometrial cancer cases, respectively. Both are considered to be high grade and confer a poor prognosis. We report a case of Endometrial Papillary Serous Adenocarcinoma in a 62 year old woman, I VG/IVP which first clinical findings were ascites and pleural effusion without gynecological symptoms. The abdominopelvic CT reported “Peritoneal implants, complex adnexal cyst and 6 mm endometrial thickening”. Exploratory laparotomy was performed and diffuse metastatic pelvic and abdominal disease did not allow the surgery to be completed. A intraoperative frozen section analysis of the peritoneal implants biopsy confirmed a endometrial tumour. Endometrial biopsy was performed with Novak probe postoperatively. Endometrial Papillary serous adenocarcinoma was diagnosed. Neoadjuvant chemotherapy was performed and
cytoreductive surgery was done on a surgical second time. Currently, the patient is clinically stable and without residual disease.

**FC16.05**

**Prognostic value of age on outcome in younger women with ductal carcinoma in situ (DCIS) of the breast**

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**Objectives:** The aim of this study was to assess the relationship between pathological features and patient’s age in the outcome of a cohort of women treated for DCIS. **Materials and Methods:** We retrospectively studied 580 patients (included 65 women <40 years) with DCIS who underwent either mastectomy or conservative surgery plus radiotherapy between 1988 and 2006 at our Department. Pathological features were evaluated and associated with patient age. **Results:** At median follow-up of 7.8 years (range 5-23 years), the local recurrence (LR) rate was 5.8% (34/580). In women <40 years there was a significantly higher LR rate than in the older ones (13.8% versus 4.8% respectively, p<0.001), and a significantly higher invasive LR rate (77.8% versus 36.0% respectively, p<0.005). Young age was not associated with worse histological features but was related with greater probability of large tumors (>40 mm) at diagnosis, probably because of the absence of mammographic screening at that age. There was a significantly lower disease-free survival (DFS) in micropapillary lesions with grade 2-3 versus other patterns with grade 3 (p<0.001). We observed that recurrence rate was 4.5% in patients with disease-free margins versus 10.9% in patients with close margins (<1 mm) (p<0.001). **Conclusions:** DCIS in women aged <40 years is a heterogeneous disease without more aggressive pathologic features than in older women, but with higher risk of LR. The nature of this association has not been established. Micropapillary pattern and margin status after surgery are also related to an increased risk of LR.

**FC16.06**

**Vulvar cancer and sentinel node biopsy: demographic characteristics and concomitant lesions**

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**Introduction:** Sentinel node biopsy (SNB) is an effective way to detect whether the cancer has spread in women with early stage vulvar cancer. Vulvar cancer may be a complication of vulvar intraepithelial neoplasia (VIN) or dermatoses, so these lesions may coexist. **Objectives:** To assess the demographic characteristics of women with vulvar cancer who underwent a SNB and to determine the rate of coexistent precancerous lesions or dermatoses. **Materials and Methods:** An observational, retrospective, descriptive study including patients with squamous cell vulvar cancer who underwent a SNB, since January 2000-November 2011 (based on consultation of medical records). **Results:** 28 women underwent a radical resection of the tumor and a SNB. The mean age of the patients was 67,1 years(± 11,2) and the range of ages was 31–81 years. Only in two cases (7,14%) the diagnosis was in premenopausal period (31 and 42 years). The mean gravidity was 2,9 and mean parity was 2,6. The primary surgical treatment showed that 20 women(71,4%) had stage IB disease. In 32,1%(n=9) of cases were found signs of human papillomavirus infection in histological examination of the removed vulva. VIN II lesions were detected in 5 cases(17,9%) in tumor-free margins. In 12 cases(42,9%) were detected lesions of liquen sclerosus. These lesions were concomitant in 14,3% of the cases(n=4). **Conclusions:** The SNB is a safe alternative to inguinofemoral lymphadenectomy and must be made an accurate selection of the cases. An early diagnosis and treatment of premalignant lesions or dermatoses is useful to reduce the incidence of vulvar cancer.
FC16.07
Is axillary dissection always necessary in breast cancer patients with sentinel lymph node involvement? Analysis of 3,383 cases
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Objective: To identify a subset of breast cancer patients whose metastatic disease was confined to the sentinel lymph node (SLN), without higher echelon node involvement. Materials and Methods: A retrospective review of breast cancer patients having SLNbiopsy (SLNB) was conducted to build a risk predicting index analyzing a set of clinicopathologic features involved with higher echelon non-SLN metastases. Results: 3,383 women underwent SLNB from 2002-2008. SLNmetastases were found in 898 patients (26.6%): 84 isolated tumor cells (ITC, 2.5%), 349 micrometastases (10.3%), 465 macrometastases (13.7%). Axillary dissection (AD) was performed in 804 cases, 277 of which revealed non-SLN metastases (34%). In 465 patients with macrometastases, 426 had AD: 228 (53.5%) had non-SLN metastases. 24 patients with metastases in the range 2.1-3mm had non-SNL metastases in 4 cases (16.6%). Among those with micrometastases, 267 underwent AD: 41 (15.3%) had metastases, and 2 had ITC in non-SLN. 24 of the 84 patients with ITC had AD and all were found to be non-SLN negative. Distant relapse was observed in 1.7% of cases with SLN micrometastases, irrespective of AD, in 1.8% of cases with SLNmacrometastases. None of the 126 patients with SLNmicrometastases and the 60 with ITC, which did not undergo AD, have developed axillary recurrence to date. We extracted 3 variables as independently related to non-SLN metastases: tumor size <15 mm, tumor grade 1 and metastases size <1 mm. Conclusions: We showed that in this selected subgroup of patients the incidence of non-SLN involvement is low (2.5%), thus AD may be safely omitted.

FC16.08
Breast cancer in pregnancy: ethical and therapeutic dilemmas
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Introduction: Breast cancer is the most common cancer in pregnant women (0.03% of pregnancies and 3% of breast cancers). These rates are expected to rise with the concomitant childbearing delay. Physiological changes of breasts during pregnancy may hinder detection of discrete masses, and therefore, early diagnoses of breast cancer. Concurrence of pregnancy and cancer does raise ethical dilemmas and therapeutic challenges. Material and Methods: Retrospective analysis of 4 case reports of breast cancer during pregnancy occurred between January 2007 and December 2011. Median maternal age was 34 years (min – 32; max - 35). The gestational age at the moment of the initial presentation ranged from 8 to 26 weeks. All the patients self-discovered the tumors as palpable masses, sizes ranging between 1.5 and 3 cm. Microbiopsies yielded histological diagnosis of invasive ductal carcinoma in three cases and comcomitant invasive lobular and ductal carcinoma in one patient. The authors describe epidemiology, pathology, clinical features, therapeutic management, foetal outcome and follow-up of these pregnant women treated at our institution. Conclusions: Ideally, diagnosis and surgical treatment of breast cancer in pregnancy are identical to the non-pregnant women. However, there are limitations in what concerns medical treatment (chemotherapy and radiation). Although there are no standard treatment protocols, it is crucial for the pregnant to deliberate its benefits and disadvantages with a multidisciplinary team, thereby articulating different therapeutic approaches. The aim is to give optimal treatment to the mother to maximize the chances of survival, whilst minimizing the risk of harm on the foetus.
Uterine smooth muscle tumor of uncertain malignant potential (STUMP) in a young woman: fertility-sparing management
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The rare uterine smooth muscle tumors that cannot be diagnosed unequivocally as benign or malignant are defined as smooth muscle tumors of uncertain malignant potential (STUMPs) by WHO. The mean age at presentation is 43 years. The diagnosis of STUMP is performed when the tumor shows a combination of the three basic criteria (atypia, mitotic rate and type of necrosis) which do not satisfy the Stanford criteria. STUMP recurrence rate range from 7.3 to 26.7%, with an higher risk related to the immunohistochemical expression of p16, p53, MIB-1, Twist, bcl-2, estrogen and progesterone receptors. Considering the rarity of the STUMP and the lack of knowledge about clinical behavior, guidelines on management and follow-up cannot be produced. Total hysterectomy is the recommended treatment, even if myomectomy can be considered a fertility sparing option for young patient. Case presentation: A 22-years-old women referred to us with menorrhagia for intramural uterine neoformation. The patient underwent to laparoscopic myomectomy. The histologic examination showed a STUMP with bcl-2 expression. Patient was informed about the risk of recurrence one year after surgery did not develop recurrence at follow up.

Radio-anatomic study of the obturator artery within the obturator foramen
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Objective: Establish a mapping of the obturator artery and its branches within the obturator foramen after radio anatomical confrontation. Material and Methods: This study has been done between January 2011 and May 2011 in Paris. Dissection of 18 obturator foramen on 9 fresh cadavers at Sugery school and Paris Descartes University. Dissection were performed in three ways: perineal, pelvic and inner thigh ways. Angioscannographic reconstruction of 16 obturator artery on obturator area were realized at the North Cardiologic center. The four main mesures were the distance between anterior, posterior, the bifurcation of obturator artery and the middle of the ischiopubic ramus; the distance between the posterior branch of obturator artery and the extern side of the obturator foramen. And then we have established a mapping of obturator artery's branches and described the vascular, nervous and muscular anatomy of obturator area. Results: The anterior obturator artery branch was at 2.42mm from the middle of the ischiopubic bone. In 50 percent of cases, it was invisible or thin. The bifurcation and the posterior obturator artery was at 29.6 mm from the half of the ischiopubic bone. The posterior obturator branch was at 3.4mm from the extern side of the obturator foramen. Conclusion: The anterior obturator artery branch was near from the ischiopubic bone whereas the posterior obturator artery branch was far from this landmark. A strong knowledge of the obturator region is necessary to avoid vascular complications during prolapse or urge urinary incontinence surgery.

Perioperative systemic betamethasone treatment reduces signs of bladder dysfunction in a rat model for neuropraxia associated with nerve-sparing radical hysterectomy
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Objectives: Radical hysterectomy (RH) is associated with bladder dysfunctions. Nerve-sparing RH (NSRH) may improve this morbidity. Preclinical models in this field are not available. The aim of our study was to
evaluate the effect of perioperative betamethasone treatment on bladder function in a rat model for NSRH. Materials and Methods: After ethical permission, female Sprague Dawley rats (250g) were subjected to bilateral pelvic nerve (PN) crush (PNC; n=20) and were given betamethasone 0.6 mg/kg/day (n=10) or vehicle (n=10) subcutaneously 5 days perioperatively. Cystometries were performed in conscious rats 3 and 10 days after nerve crush. Tissue organ baths were performed to study functional characteristics of detrusor muscle. Bladder collagen content was assessed using Masson’s trichrome staining and quantified by western blot analysis. Immunohistochemical stainings for CGRP, PGP 9.5, vesicular acetylcholine transporter protein (VACHT), smooth muscle α-actin and CD68 were evaluated. Results: The incidence of dribbling incontinence in PNC rats was significantly lower in rats treated with betamethasone (p<0.05). The frequency of non voiding contractions (NVC) was similar in both groups but the amplitude of the NVC of vehicle treated rats was larger (p<0.05). Contractile frequency response curves to activation of nerves were lower in bladder preparations form vehicle treated rats. Larger amounts of CD68 immunoreactivity in the pelvic plexus, larger amount of collagen and a less homogeneous innervations of bladder were detected in vehicle treated rats compared to betamethasone treated ones. Conclusions: Perioperative systemic betamethasone reduced changes in bladder tissue and preserved micturition function in rats with PN injury.

FC17.03
Epidemiology of pelvic organ prolapse surgery in Finnish women 1987-2009
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Objectives: The aim of the study was to find out the annual incidence rate of operative treatment of pelvic organ prolapse (POP) in Finland from 1987 to 2009 and to determine the life long risk for POP surgery. Materials and Methods: In Finland National Institute for Health and Welfare keeps an inpatient registry from which we obtained information of women who had surgery for POP 1987-2009. Reoperations were excluded. The exact numbers of inhabitants in Finland were obtained from Statistics Finland. Annual age-specific incidence of POP surgery was calculated for 6 age groups (18-39, 40-49, 50-59, 60-69, 70-69 and over 80). The cumulative incidence was calculated to estimate the risk for POP surgery at older age. Results: The age-specific incidence of operative treatment of POP has remained quite stable throughout our research period, being 1.2/1000 for all women over 18 years in 1987 and 1.3/1000 in 2009. The highest incidences are seen within the age groups 60-69 and 70-79 throughout our survey, with average annual rates 2.8/1000 and 3.6/1000 of these women, respectively. The life long risk to have undergone a surgery for POP by the age of 69 is 6.2% and, due to a higher incidence in elderly, 9.8% by the age of 79. Conclusions: The age specific incidence of POP surgery was quite stable during the study period 1987-2009. The cumulative incidence (9.8%) by the age of 79 showed that almost every tenth Finnish woman will have surgery for pelvic organ prolapse in her lifetime.

FC17.04
Epidemiology of stress urinary incontinence surgery in Finnish women 1987-2009
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Objectives: The aim of the study was to evaluate the annual incidence rate of operative treatment of SUI (stress urinary incontinence) in Finland 1987-2009 and to determine the life long risk for SUI surgery. Materials and Methods: Information of women who had surgery for SUI in 1987-2009 was obtained from National Institute for Health and Welfare which keeps an inpatient care registry in Finland. Reoperations were excluded. The number of inhabitants was obtained from Statistics Finland and annual age-specific incidence rate for 6 age groups (18-39, 40-49, 50-59, 60-69, 70-79 and over 80) and cumulative incidence for SUI surgery were calculated. Results: The incidence of SUI surgery for all women over 18 years has changed from 0.3/1000 women in 1987 to 0.8/1000 in 2009, peaking in 2002 with 1.3/1000. The highest incidence occurred within the age group of 50-59 in the 80’s and 90’s. After the introduction of TVT in 1998 the incidence rapidly rose and the highest incidence was observed in 2002 within the age group 60-69 (2.8/1000). The life long risk for SUI surgery for women by the age of 79 was 4.5% based on the incidence
rates throughout the research period. The same risk calculated using the peak incidence rates in 2002 would be as high as 8.7%. Conclusion: The incidence rates for SUI surgery have varied considerably in Finland from 1987 to 2009, peaking in 2002. The life long risk for SUI surgery by the age of 79 in Finnish women is 4.5%.

FC17.05
The role of the MRI and transperineal ultrasound in POP surgery
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Complications of modern pelvic surgery such as a recurrence of pelvic organs prolapse are often associated with inappropriate surgical treatment. The failure to identify the best way of treatment is caused by inefficient examination. An integral approach to patients examinations will allow us to consider the pelvic on the whole. Aim: to search the main preoperative diagnostic methods of the POP and the role of each of them. Material and Methods: 125 women with POP before operation were included to the prospective research from 2004-2011. Results: All patients were examined using tests, POP-Q, elevate-test, vagotopomapping and others. We used an additional methods such as MRI and perineal ultrasound (US). Specificity of clinical research (POPQ) in the relation of cystocele and rectocele in at patients with apical prolapse makes 35 %. The most informative method in cystocele diagnostics is US (sensitivity (Se)= 97 %,) in apical prolapse – MRI (Se=95 %) and US (Se 60 %), in rectocele - dynamic MRI (Se 83 %) using contrast gel the Se increase till 95 %. Conclusion: The additional methods helps us to make a choice from different operations and avoid unnecessary operations, to limit synthetic materials and predict postoperative complications.

FC18.01
CVS in first, second and third trimesters of pregnancy. The Bordeaux University Hospital sampling technique and strategy. (video film 9 mn)
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Thanks to our experience with over 25800 early and late CVS we think that to obtain satisfactory samples for karyotyping the quality of the sampling technique is essential. The following video shows the major steps necessary to collect good samples: 1.Use a 20-gauge needle rinsed with heparin serum introduced through the abdominal wall without analgesia. (without local anaesthesia or premedication). 2.The operator holds the needle in one hand and the ultrasound probe in the other. 3.The needle is guided into the thickest chorion zone, 4.The needle is linked to a 20 ml syringe by a plastic extension tube, 5.The operator then makes an up and down and rotating movement of the needle for 25 to 30 seconds, 6.While an assistant aspirates at first with a back and forth movement and then continuous suction. 7.The cytogeneticist immediately checks and decides whether the amount of material is sufficient for setting up cultures for karyotyping (20 mg). 8.Microscopic selection of villi is performed to avoid maternal cell contamination which would interfere with reliable karyotyping. Conclusion: In our department, the same technique is used in the first, second and third trimesters of pregnancy.

FC18.02
Our experience with ultrasound diagnosis of congenital diaphragmatic hernia
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Objectives: The aim of the study was to evaluate our results of prenatal diagnosis of congenital diaphragmatic hernia (CDH). We analyzed data collected between 2003 and 2010 and compared markers of severity of lung hypoplasia – lung-to-head ratio (LHR) and observed to expected LHR (O/E LHR), localization of the fetal liver and postnatal outcome of fetuses. Material and Methods: A retrospective study
of fetuses with prenataly diagnosed CDH born in our institute. We included data from prenatal ultrasound examinations, vaginal vs. caesarean delivery, postnatal development, CDH associated defects and short term morbidity of newborns. Since January 2011, we analyzed and compared the measured parameters in collaboration with prof. dr. J. Deprest (Fetal Medicine Unit, Department of Obstetrics and Gynaecology University Hospital, Leuven, Belgium). Results: In a total of 40 fetuses, the mortality was 37%. There were 8 fetuses with associated malformations, 3 fetuses with a bilateral diaphragmatic defect and 2 fetuses with right-sided CDH. Statistical analysis proved significant correlation between the localization of liver (liver up and liver down groups) and mortality (p= 0.019) in our group. LHR and O/E LHR was higher in the group of survivors but there was no significant difference (p=0.72, p=0.413). In the last four patients (correlated with the center in Leuven) we were able demonstrate a better correlation with postnatal outcome. Conclusion: The lung to head ratio and observed to expected LHR represent the standard ultrasound diagnostic parameters in fetuses with CDH. To achieve maximal predictive value standardization is required.

FC18.03
Prenatal diagnosis of interruption of the aortic arch and its association with deletion of chromosome 22q11.2
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Objectives: We present here a case of interruption of the aortic arch type B diagnosed at 21 weeks of gestation diagnosed. To the best of our knowledge this is the first report of interruption of the aortic arch diagnosed and reported in a fetus in Estonia. The 22q11.2 microdeletion detected using analysis fluorescence in situ hybridization (FISH). Methods: Echocardiography and FISH for the DiGeorge critical region (22q11.2) were performed. The findings were confirmed by autopsy. Results: A diagnosis of interrupted aortic arch type B with deletion of chromosome 22q11.2 was made and termination of the pregnancy was offered due to the uncertain prognosis associated with DiGeorge syndrome. A 434 g female fetus was delivered by mifepristol and misoprostol induction. The autopsy revealed that there is no connection between the ascending and descending aorta. The brachiocephalic artery and the left common carotid artery are seen to arise from the aorta. The left subclavian artery arises from the ductus arteriosus. A dilated ductus arteriosus, a high membranous ventricular septal defect were confirmed. The karyotype was abnormal: 46, XX, ish del (22)(q11.2q11.2)(TUPLE 1-). Karyotypic evaluation showed no 22q11.2 deletion neither parents and risk of recurrence is therefore small (1%). Conclusion: Our case confirms that normal four chamber view do not exclude defects of the great vessels. FISH for 22q11.2 deletion must be specifically requested in a addition to routine karyotyping when interrupted aorti arch is diagnosed.

FC18.04
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Objective: To assess the diagnostic efficacy of the routine mid-trimester anomaly scan in the detection of major fetal anomalies in an unselected population scanned at the biggest antenatal unit in Estonia. Materials and Methods: A retrospective analysis of patient histories where a baby with a major congenital anomaly was born was undertaken, in order to determine the timing of the diagnosis. Only cases with anomalies expected to be diagnosed prenatally and those with a significant implication on neonatal outcome were included. We did not include cases where a pregnancy was terminated due to a major fetal anomaly. Results and Conclusions: The prevalence of major abnormalities among 12 852 deliveries during the period of 2007-2009 was 0.61% (79/12 852). The detection rate of major abnormalities at the routine anomaly scan performed at 19-22 weeks was 26.5% (21/79). 16% (13/79) were diagnosed during the third trimester scan (other indications for the scan) and 2.5% (2/79) after amniocentesis. However, more than half (54% or 43/79) of the anomalies were only diagnosed postnatally. Third trimester scans had a considerable impact on
the prenatal detection rate of anomalies. Implementing a longer duration for the scan, only specialized sonographers performing the scan and regular auditing could improve the performance of the routine anomaly scan and thus neonatal outcome in a longer perspective. Further research is needed in order to determine the overall detection rate of the mid-trimester scan by inclusion of the pregnancies that are terminated due to a major fetal anomaly.

**FC18.05**
Prenatal diagnosis of pulmonary sequestration by ultrasound and magnetic resonance imaging
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Introduction: Pulmonary sequestration is an embryonic mass of lung tissue that has no identifiable bronchial communication and that receives its blood supply from 1 or more anomalous systemic arteries. Case Report: A 34-year-old G2P1 underwent routine ultrasound scan at 20+1 weeks of gestation, which revealed a single normally growing fetus with right intrathoracic mass. The right intrathoracic wedge-shaped hyperechogenic mass, measuring 22 × 16 mm in size was situated at the lower portion of the right lung. A combination of color and power Doppler ultrasound allowed visualization of a vessel arising from the descending aorta, which supplied the mass. The diagnosis of extralobar pulmonary sequestration was made. Magnetic resonance imaging was also performed and revealed a well-defined mass with homogeneous high-signal intensity when compared with normal lung tissue in the right upper lung field, which was compatible with pulmonary sequestration. The pulmonary mass was followed up by color and power Doppler every 2 weeks. Conclusion: The natural history of prenatally diagnosed lung masses is variable, and associated anomalies are rare. Many extralobar pulmonary sequestrations dramatically decrease in size before birth and may not need treatment after birth. Fetal therapy is now an option in some countries, in cases of pulmonary lesions associated with nonimmune hydrops.

**FC18.06**
Current options of non-invasive prenatal diagnosis based on the presence of extracellular nucleic acids in maternal circulation in Czech Republic
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Extracellular nucleic acids (DNA and RNA) in maternal circulation enable non-invasive fetal genotype determination using modern molecular diagnostics approaches. The large scale multicenter studies were performed in Czech Republic to integrate non-invasive fetal sex determination, RHD and RHCE genotyping using extracellular fetal DNA in maternal plasma into the management of pregnancies at the risk of X-linked disorders, congenital adrenal hyperplasia and haemolytic disease of the newborn caused by anti-D, anti-c/-C and anti-E alloantibodies. The work was supported by MSM0021620806.
Extracellular nucleic acids in maternal circulation as potential biomarkers for placental insufficiency
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Since the placenta is being continuously remodeled during normal placental development, extracellular nucleic acids of both fetal and placental origin, packed into trophoblast-derived apoptotic bodies or in shedding syncytiotrophoblast microparticles, may be detected in maternal circulation during the course of normal gestation. Placental insufficiency related pregnancy complications have been shown to be associated with excessive placental trophoblast apoptosis and shedding of placenta debris. Recent advances in the field are reviewed with a focus on the diagnostic potential of particular molecular biomarkers (SRY, DYS-14, hypermethylated RASSF1A sequence, placental specific microRNAs) and their eventual implementation into the currently used predictive and diagnostic algorithms for placental insufficiency related pregnancy complications.

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Prenatal diagnosis of palatine and lip cleft – case report
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Facial clefts are the most craniofacial anomalies with an incidence near the 1.4 cases per 1000 births. Typical facial clefts involve the line running between each nostril and the central part of the posterior palate. In most cases, they have multifactorial etiology and encompass different severity levels. Their prenatal diagnosis is sonographic while the prognosis depends primarily on the presence and type of associated anomalies. 36 years old women with story of primary infertility. Pregnancy resulting from intra-cytoplasmic sperm injection, monitored by an Obstetrics team of “Centro Hospitalar do Alto Ave”. Until uneventfully at 23 weeks, when appears on morphological ultrasound fetal cleft lip and bilateral cleft palate. A fetal echocardiogram was performed showing normal results. Amniocentesis had the following karyotype: Klinefelter syndrome in mosaicism. At week 27 a diagnosis of gestational diabetes was done, followed by a patient hospitalization due to a suspicion of premature rupture of preterm membranes, which was not confirmed. Another hospitalization occurred at week 32 due to oligoamnios. The patient was proposed for cesarean at week 35 due to oligoamnios in fetus in pelvis presentation. The cesarean was performed without any relevant issues. The newborn was forward to the Pediatric Surgery of “Hospital de São João” and to the Genetics Medical Center. Facial clefts are considered excellent signs for the presence of associated malformations and fetal aneuploidies. Fetuses with this malformation must be referred to specialized centers in order to have specific ultrasound and genetic analysis, which can provide the best prenatal counseling for parents.
Human chorionic gonadotropin beta genes: expression, genetic variation and reproductive failure

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Low level of HCG is associated with miscarriage and extrauterine pregnancy (EP). The specificity of heterodimeric HCG hormone is determined by the beta-subunit encoded by four genes: CGB, CGB5, CGB7, CGB8. Recurrent miscarriage (RM) is defined as ≥3 pregnancy losses and may have genetic predisposition. Objectives: We aimed to (i) determine the expression profile of CGB genes during the normal and failed pregnancy (RM, EP); (ii) find RM- associated gene variants. Material and methods: The expression of the CGB genes in trophoblastic tissue was determined by qPCR. CGB5 and CGB8, the two most actively transcribed genes were resequenced or genotyped in RM patients (n=660) and fertile women/couples (n=431) from Estonia, Finland and Denmark. Results: Low serum level of HCG was consistent with low expression of the CGB genes in RM but not in EP pointing to differential regulation of gene transcription/translation in these pathologies. The promoter area of CGB5 harbours four SNPs involving motif that decreases the risk of RM 1.5–fold (p<0.025; OR=0.66-0.67, 95%CI 0.46-0.95). The combination of minor alleles of two common SNPs (rs 8102901, rs4801790) promoter area of CGB8 (minor allele frequencies >23%) was missing in all 1091 studied individuals (p=3.6x10^-43) possibly representing a haplotype with unfavourable effect. Three non-synonymous amino acid substitutions (p.Pro73Arg, p.Arg8Trp and p.Val56Leu) were identified in patients with RM. Conclusions: RM is associated with low transcriptional activity of CGB genes. The polymorphisms in gene transcription regulating promoter area and non-synonymous amino acid substitutions in CGB5 and CGB8 modify the risk of RM.

TNF-related apoptosis-inducing ligand TRAIL as a potential biomarker for early pregnancy complications

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Recurrent miscarriage (RM; ≥3 pregnancy losses) occurring in 1-3% of fertile couples has a heterogeneous background with contribution from both genetic and environmental factors. No biomarkers with high predictive value of threatening miscarriage have been identified. Objectives: We aimed to (i) perform whole-genome gene expression profiling in the placental tissues from RM patients and elective termination of pregnancy, (ii) determine the protein levels in maternal sera during early pregnancy for the loci with differential expression in placenta. Methods: GeneChips (Affymetrix®) were used for discovery and Taqman RT-qPCR assays for replication of mRNA expression in placentas from RM cases (n=13) compared to uncomplicated pregnancies matched for gestational age (n=23). Concentrations of soluble TRAIL (sTRAIL) and calprotectin in maternal serum in normal first trimester (n=35) and failed pregnancies: early miscarriage (n=18), late miscarriage (n=4), tubal pregnancy (n=11) were determined by ELISA. Results: In RM placentas 30 differentially expressed transcripts were identified. Significantly increased placental mRNA expression of TNF-related apoptosis-inducing ligand (TRAIL; p=1.4x10^-3; fold change 1.68) and S100A8 (p=7.9x10^-4; fold change 2.56) encoding inflammatory marker calprotectin (S100A8/A9) was confirmed by RT-qPCR. Compared to normal pregnancy (sTRAIL 16.1±1.6pg/ml), significantly higher maternal serum sTRAIL was detected at the RM event (33.6±4.3pg/ml, p=0.00027), tubal pregnancy (30.5±3.9pg/ml, p=0.035) and also in pregnant women, who developed an unpredicted miscarriage after serum sampling (28.5±4.4pg/ml, p=0.039). Maternal serum levels of calprotectin were neither diagnostic nor
prognostic of early pregnancy failures (P>0.05). Conclusion: The current study identified sTRAIL as a potential biomarker in maternal serum for prediction of early pregnancy complications.

**FC19.03**

**Differentiated approach to the examination and treatment of the women with the threatened miscarriage**

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In order to develop a system of examination and management if pregnant women with the threatened miscarriage and partial detachment of the chorion in the first trimester we performed the prospective survey of 139 women. From them, 53 women with normal singleton pregnancies were the control group. The main group included 86 pregnant women with the threatened miscarriage and detachment of the chorion with the retrochorional hematoma in the first trimester of pregnancy. Detection of retrochorional hematoma prior to 6 weeks of gestation in 33-50% is a marker of early reproductive losses. A differential approach to treatment depends on the received echographic, clinical and laboratory data. When CRL lower than normal for 10 days, changing the fetal heart activity (bradycardia or tachycardia), reducing the production PGF (more than 2 times or zero level of PGF) must be assigned: repeat the ultrasound examination (every 3-5 days) of a high probability of non-developing pregnancy, progestins (Duphaston, Utrozhestan), aspirin (100 mg/day), Metipred (in the case of hyperandrogenism, a large volume of hematoma). If the volume of amniotic and chorionic cavities reduced, and no signs of hematoma organization should be applied: gestagens (Duphaston, Utrozhestan), Metipred (in the case of identified hyperandrogenism), necessarily - Actovegin, magnesium (Magne B6). In early polyhydramnios in combination with increasing the diameter of the yolk sac should be performed the testing for sexually transmitted infections and bacteriological examination of the contents of the cervical canal. Therapy should include: early antibiotic treatment (if indicated), immunotherapy, Duphaston, Actovegin.

**FC19.04**

**Ethnic preference in management of first trimester miscarriage**

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Objective: To look at ethnic preference in the management of first trimester miscarriage. Methodology: Retrospective case note audit from January 2008 to 2010 across two hospitals in Leicester including all first trimester miscarriages. There were a total of 159 patients. Results: The group comprised of 23% Asians and 73% Caucasians. Among the Asians, 72% had a missed miscarriage and 28% had an incomplete miscarriage. 72% of the Caucasians had a missed miscarriage and 22% had an incomplete miscarriage with no data available in 8%. Overall, our audit showed that the patients were offered appropriate management options which were natural, medical and surgical or a combination of these as per hospital protocol. In the Asian group, 58% chose natural, 25% chose surgical and 17% opted for medical management. In the Caucasian group 38% chose natural, 35% chose surgical and 25% chose medical management. In the same group, we looked at management of any previous first trimester miscarriages. 36% Asians had a previous miscarriage. 61% had chosen natural management and 8% surgical management. Among the Caucasians, 26% had a previous miscarriage with 27% opting for natural and 30% for surgical management. 6% Caucasians opted for medical management. There was no data available for 31% Asians and 37% Caucasians. Conclusion: Natural management was preferred by the Asian population. Areas for further research highlighted by this audit include presence of any cultural reasons for choosing a particular method of management. It emphasises the importance of taking into account socio cultural factors when counselling women.
FC19.05
The role of human papilloma virus infection in spontaneous abortion
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Objectives: Some investigators point that viral infections can be second most frequent reason of miscarriage. HPVs present affinity to proliferating cells. HPVs can also replicate in flat epithelium cells, glandular epithelium as well as in syncytiotrophoblast. It seems that viruses with affinity to trophoblast can be associated with higher risk of miscarriage. The aim was to assume the frequency of HPV infection in group of women with miscarriage and to compare it to the frequency of HPV infection in group of age-matched women with successful pregnancy. Material and Methods: 97 patients with miscarriage diagnosed were the study group. They all have diagnostic tests for HPV DNA detection in cervical and uterine sample performed. 92 patients with successful pregnancy were the control group. HPA DNA detection were performed by Real Time PCR. Results: HPV infection was found in 15 out of 97 (15,46%) patients in study group and in 7 out of 92 (7,61%) in control group. Although HPV infection was over 2 times more frequent in study group there was no significant difference vs. control one. High risk oncogenic HPV was found in 11 out of 97 (11,34%) patients in study group and in 4 out of 92 (4,35%) in control group - no significant difference and low risk oncogenic HPV was found in 4 out of 97 (3,26%) in study group and in 3 out of 92 (3,26%) in control group - no significant difference as well. Conclusions: HPV infection is probably not a pathogenic reason of miscarriage.

FC19.06
Evaluation of pregnancy in women with threatened miscarriage
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Objective: The aim of the study was to evaluate pregnancy outcome in women with threatened miscarriage in I and early II trimester of pregnancy. Materials and Methods: In retrospective study we compared the pregnancy outcomes in 100 women (I–study group), who were hospitalized in Gynecologic Clinic of Riga Eastern Clinical University Hospital with diagnose of threatened abortion, in the time period from 1st January 2011 till 1st July and delivered in Riga Maternity hospital or Paul Stradins Clinical University Hospital’s maternity department, with pregnancy outcomes in women (II–control group), who didn’t experienced threatened abortion during present pregnancy. Control group consists of 100 cases of deliveries in consecutive order in Riga Maternity Hospital, in the time period from 1st January 2011. Results: Average age in I group is 28,23±5,16 years, II group - 28,38±5,42 years (p=0,84). Preterm delivery in I group – 8/100(8%), II group – 1/100(1%) (p<0,05). Preterm premature rupture of membranes in I group 23/100(23%), II group – 12/100(12%) (p<0,05). Intrauterine growth restriction in both groups 2/100(2%). Congenital anomalies I group 3/100 (3%), II group 0/100 (p<0,05). One or more cases of previous miscarriage in I group 29/100(29%), II group – 9/100(9%) (p<0,05). Conclusions: According to our study we can conclude, that ongoing pregnancies following I and early II trimester bleeding, are associated with adverse pregnancy outcome such as increased risk of premature labour, preterm premature rupture of membranes, and congenital anomalies. There might be potential link between previous miscarriage in history and following threatened miscarriage in future pregnancy.

FC19.07
Efficacy of misoprostol in the treatment of early pregnancy failure in relation to uterine position
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Objective: To evaluate the efficacy of misoprostol in the treatment of missed (MA) or incomplete abortion (iAB) in relation to uterine position. Methods: In a retrospective cohort-study at the Department of Obstetrics and Gynecology, Medical University Graz, Austria, misoprostol was evaluated as first line treatment for MA and iAB prior to 13 weeks’ gestation. Between 01/2009 and 11/2011 patients received 600µg of misoprostol for MA or 400µg for iAB sublingually after informed consent. Follow up examinations were performed 7-10 days later with the option of a second misoprostol administration.
Success was defined by absence of vaginal bleeding or sonographic signs for iAB and by significant drop of beta-HCG levels. Demographic and clinical data as well as uterine position were extracted from the local medical documentation system. Results: 111 patients (89 MA and 22 iAB) were included in the study. In 73 (65.8%) patients a single dose regimen was effective. The overall success rate including repeated doses of misoprostol was 72.1% (81/111). There were no statistical differences between MA and iAB (56/89 (62.9%) vs. 18/22 (81.8%), p=0.152). Anteverted uterine position compared to diverging positioning showed significant higher success rates (62/86 (72.1%) vs. 4/18 (22.2%) p=0.001). Discussion: Misoprostol is an effective treatment for early pregnancy failure. Uterine position does impact success of medical treatment. Presented data can be useful in the management of early pregnancy failure. Prospective studies with higher case load are required to confirm this observation.

FC19.08
Analysis of HLA-G+ regulatory cells and HLA-G polymorphisms in women with unexplained recurrent spontaneous abortion
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HLA-G is a non classical HLA member that has been associated with maternal–fetal tolerance. Tolerogenic dendritic cells (DC) that express high levels of HLA-G and its ligend ILT4 are essential in the induction of regulatory T (Treg) cells in the periphery. The 3’ untranslated region (3’ UTR) of the HLA gene contains 8 variation sites, two of which associated with mRNA stability: the 14-bp deletion/insertion and a SNP at +3142 position. Objectives: To identify the maternal HLA-G polymorphisms in women with recurrent implantation failure (RIF) after in vitro fertilization (IVF) and to elucidate the impact of the 3’ haplotypes on the recruitment of HLA-G+ DCs. Methods: Genomic DNA was extracted from peripheral blood of RIF patients and fertile women and sequenced. The decidual mononuclear cells purified from women with spontaneous abortion (SA) and women undergoing elective abortion (EA) were studied by flow cytometry. Results: A higher proportion of tolerogenic (p=0.02) HLA-G+/ILT4+ DCs were found in the decidua of SA versus EA. A higher proportions of CD4+HLA-G+ and CD8+HLA-G+ (p=0.028) T cells were observed in SA versus EA. The frequency of the 14 bp insertion haplotypes has been found higher in RIF patients compared to the controls (5, 62%, n=8. Vs s 5, 25%, n=20). The +14bp/+14bp genotype was more frequent in RIF patients (2, 50%, n=4 vs 0, n=10). Conclusions: Our preliminary data suggest that HLA-G+ cells might accumulate in the decidua of SA in order to counteract the excessive inflammation associated with fetal rejection.

FC20.01
Psychological approach to a female fertility preservation program
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Objectives: Iatrogenic infertility due to gonadotoxic therapies represents an additional emotional and psychological damage for young women affected by cancer. Since 2001, we addressed women at high risk of premature ovarian insufficiency (POI), both for benign or oncological diseases, to a project called Fertisave, to preserve female fertility. This program represents a “preservation of life” chance, nevertheless patient’s anxiety and psychological distress can overcome the desire to adhere to it. The present study was aimed at checking for information comprehensibility by the patients to improve both the consciousness of their decision-making process and the effectiveness of doctor-patient communication. Our main goal was to understand patients’ needs in order to better take care of them in a life-threatening situation. Materials and Methods: First we attended medical consultations and examined doctor-patient communication. Secondly, a questionnaire in the form of a semi-structured interview was given to patients to investigate their expectations and difficulties; we also administered the State-Trait Anxiety Inventory to measure anxiety.
Finally, a psychological support was offered to all patients. Results: We observed that patients’ emotional involvement strongly affects the level of understanding of the received informations. The possibility of integrating clinical information and emotional elaboration enabled patients to better understand and accept the proposed project. Conclusions: Fertility preservation is an important aspect of quality of life, rich of psychological implications. The possibility to preserve fertility may become an element of hope. According to our observations, the psychological support is an essential part of the patient's care in this area.

**FC20.02**  
**Mini-invasive approach. Vaginal myomectomy**  
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Today we are exposed to all brand new technology and equipment and sometimes we tend to underestimate a well proven vaginal approach. Methods: The stages of operation are as follows: anterior/posterior colpotomy, fixing node with bullet forceps, traction of the uterus by the node through the colpotomy aperture. Myomectomy is similar to abdominal approach. In 5 years we’ve done 85 myomectomies through anterior/posterior colpotomy, 1-15 fibroids removal 0.5-12 cm in diameter, subserous, intramural, intraligamental, fundal localisation. Middle patient age 31 years. Main complaines were primary, secondary infertility, pregnancy loss, menorrhagia, pelvic pains, pelvic organ dysfunction. Most operations done in epidural anaesthesia. Average operation time 60 minutes, blood loss - 150 ml. In concomitant laparoscopy cases we stitched large noduses to facilitate its vaginal mobilization that allows young doctors to operate correctly. This technique allows us to perform myomectomy in quite challenging cases with large and difficultly located nodes. We managed to remove 10 nodes in one patient. The biggest node was about 12 sm. Inflexibility of the uterus made the situation even more difficult. Almost all the nodes had to be morcellated. Conclusion: Vaginal route at radical or reconstructive gynecologic surgery is effective, careful and economically founded technique. Vaginal myomectomy is combined advantages of the abdominal stitch and laparoscopic mini-invasive route. This way allows us to perform a high-grade suture in the uterus in patients who is planning to have future pregnancy with minimum invasive technique.

**FC20.03**  
**Letrozole vs. clomiphene citrate plus IUI for women recently surgically treated for severe or recurrent endometriosis: a randomized controlled trial**  
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Objective: to compare, in a randomized controlled fashion, endometriosis recurrence rate and pregnancy outcomes of two COS protocols for IUI in patients with severe endometriosis. Materials and methods: Women with patent tubes were eligible if desiring conception immediately after surgery for endometriosis stage IV or re-intervention for endometriosis recurrence or after stopping combined oral estroprogestins as maintenance therapy. Patients were randomized to receive letrozole (2.5 mg) (n = 78) or clomiphene (100 mg) (n = 81) day 3-7 of menstrual cycle. hCG was administered when at least 1 ovarian follicle was ≥8805; 18 mm and IUI was performed 24-36 hours later. Main outcome measure(s): endometriosis recurrence rate (ERR), pregnancy and miscarriage rates per cycle, number of follicles and serum estradiol level. The ERR was calculated with life table analysis from the first cycle of COS for IUI. Results: The ERR was significantly lower in the letrozole group (p=0.02). The relative risk to develop recurrence was 2.49 for CC group. The pregnancy and miscarriage rates per cycle were similar in both groups (p=0.65 and p=0.89 respectively). The number of mature follicles was comparable in both groups. Serum estradiol at the hCG day was significantly lower in the letrozole group (p<0.001). Conclusions: In endometriotic women submitted to COS for IUI, letrozole is as effective as CC in term of pregnancy and miscarriage rate, even maintaining significantly lower serum estradiol, and it is associated to a significantly lower ERR. This aspects could represent a valid reason for preferring letrozole instead of CC.
**FC20.04**

**Interstitial pregnancy successfully treated with systemic Methotrexate – case report**

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Introduction: Interstitial pregnancy refers to a pregnancy that is implanted in the tubal segment traversing the muscular wall of the uterus. This relatively thick portion of the tube has a greater capacity to expand before rupture, and this peculiar anatomical location sometimes leads to delayed diagnosis. For these reasons, rupture can occur after 7-16 weeks, with catastrophic hemorrhage, which is accentuated by the rich local vascularization. A high index of suspicion favors early detection, reducing morbidity and mortality. Sharing the same risk factors, incidence ranges from 2-4% of all tubal pregnancies, but mortality rate is 2.5% (7 times higher). Development of high-resolution ultrasound and quantitative β-hCG assays has allowed detection before rupture (6.9-8.2 weeks) and conservative treatment methods (surgical or chemical), instead of classical cornual wedge resection or hysterectomy. Expectant management is inadequate, taking into account this life-threatening condition risks, the unpredictable course to resolution and long follow-up time (with significant costs and disability). Case report: Authors discuss a case of interstitial pregnancy successfully treated with systemic methotrexate, despite a maximum β-hCG value of 26041 mUI/mL. The case refers to a 34-year-old woman with previous history of infertility, endometriosis, bilateral salpingectomy, bilateral ovarian cystectomy and four failed attempts of assisted reproductive techniques. Current pregnancy resulted from transfer of two embryos, obtained from ICSI with donor oocytes.

Discussion: As shown by scientific evidence, systemic methotrexate is a safe first line treatment option for early diagnosed, unruptured interstitial pregnancies, in stable patients, even with high β-hCG values, avoiding surgical risks and enhancing fertility preservation.

**FC20.05**

**Comparison of different stimulation protocols efficacy in poor responders undergoing IVF**

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Objectives: To compare the efficacy of different stimulation protocols on pregnancy outcomes in poor responders undergoing in vitro fertilization (IVF). Materials and Methods: This was a retrospective study to compare the efficacy of four different protocols including gonadotropin-releasing hormone (GnRH) agonist (long, short and ultrashort) and GnRH antagonist on pregnancy outcomes in poor responders. This investigation was performed on 84 poor respond patients who were candidates for IVF. Main outcome measures included the total number of oocytes and mature oocytes retrieved, pregnancy rates, implantation and overall cancellation rates which were compared between four mentioned groups. Results: Number of follicles >18mm on hCG day were significantly higher in GnRH-an antagonist versus GnRH long agonist, GnRH-a short and GnRH-an ultrashort protocols. The mean number of oocytes and mature oocytes retrieved were significantly higher in GnRH-antagonist versus short and long agonist (4.3 versus 4.2 and 3.5 respectively). The mean number of embryos obtained was superior in antagonist protocol (2.4 versus 1.9; p<.001). There were no significant differences in implantation, pregnancy and over all cancellation rates between four groups. Conclusion: The present study suggests that the application of four different protocols in poor respond patients seem to have similar efficacy in improving clinical outcomes such as implantation, pregnancy rates and cancellation rate even though GnRH-antagonist protocol yielded more retrieved oocytes and mature oocytes compared to GnRH-long protocol.

**FC20.06**

**Menstruation cycle resembles parametric oscillation and subject to exact prediction: mathematical model explaining hypothalamic behavior in response to stress, multiple pregnancies risk and external stimuli**

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Objectives: Reproductive events (cycle length, ovulation) behave regularly in some and chaotic in others. A mathematical model based on empirical data is developed to predict these parameters and hypothalamic
oscillations with enough exactness. Materials and Methods: Thirty eight cases were evaluated by autoregressive moving average and laboratory study of a series of hormones. Results: Cycle to cycle correction with noise is the best model fit to both very regular and very irregular patients. Addition of two hormones (estradiol and GnRH twice) at any time during the cycle can predict the time of the next menstruation with an exactness of 10h and fertility based on the simplified formula: $T_1 = T_0 + k \int [\Omega(\text{Est-}d_0\text{GnRH}_0/\text{GnRH}_1) dt]$. Conclusions: 1. The hormonal armamentarium of the female reproductive systems ensures single ovulation and single pregnancy. 2. Unlike bone marrow ovaries do not posses a stochastic mechanism and rely solely on suppression of nearby follicles by the dominant follicle. 3. Hypothalamus senses the risk of MP and adjusts pulsation of GnRH in the consecutive cycle by prolonging the low and postponing the high frequency pulsation. Like electric circuits, external stimuli have a changing strength of 1/4 to 1/15 meaning that they can advance or retard ovulation in this range (percentage of the innate cycle of that person). 4. The strongest predictor and determining parameter affecting menstruation cycle is sensing the MP risk by the hypothalamus exemplifying itself as frequency of GnRH pulsation ($d_0\text{GnRH}_0/\text{GnRH}_1$). 5. Menstruation cycle and fertility can be predicted by mathematical formulas of parametric oscillation.

FC21.01
Elevated sTREM-1 levels in maternal serum during term and preterm labor
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Objective: The purpose of this study was to assess concentrations of soluble triggering receptor expressed on myeloid cells (sTREM)-1 in maternal serum during term and preterm labor (PTL). Materials and Methods: This cross-sectional study included 176 singleton pregnancies in the following groups: (1) preterm birth, delivered before 34 weeks gestation (PTB) (n=52); (2) preterm (PT) not in labor, matched for gestational age (GA) with the PTB group (n=52); (3) women with an episode of PTL who delivered at term (n=10); (4) At term (AT) in labor (n=40) and (5) AT not in labor (n=32). Serum concentrations of sTREM-1 were determined by enzyme-linked immunoassay. Results: sTREM-1 was detected in all serum samples. Median sTREM-1 concentrations were significantly higher in women with PTB vs. PT not in labor (367.3 pg/ml, interquartile range (IQR) 303.9-483.1 vs. 272.7 pg/ml, IQR 207.7-334.1; P<0.001) and in women AT in labor vs. AT not in labor (300.0 pg/ml, IQR 239.1-353.0 vs. 227.6 pg/ml, IQR 173.9-284.7; P<0.001). Women with PTB had significantly higher levels of sTREM-1 compared to women AT in labor (367.3 pg/ml, IQR 303.9-483.1 vs. 300.0 pg/ml, IQR 239.1-353.0; P=0.004). No significant differences in sTREM-1 levels were observed between patients with PTB (only those presented with PTL and intact membranes) vs. women with an episode of PTL and at term delivery (342.2 pg/ml, IQR 303.2-436.2 vs. 311.8 pg/ml, IQR 188.7-408.4; P=0.23). Conclusion: sTREM-1 is upregulated in serum of women during term and preterm labor, suggesting that sTREM-1 is associated with the inflammatory response during labor.

FC21.02
Outcome of the first after-conisation pregnancy in the East Tallinn Central Hospital (ETCH)
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Objectives: To describe the outcome of the first pregnancy after conisation; test the association between the outcome of pregnancy and depth of the conisation and the time between conisation and conception. Materials and methods: Cohort of patients who had undergone the conisation procedure in ETCH 2006-2010 was followed retrospectively by electronic records. Results: A total of 1740 conisation procedures were identified, information about after-conisation pregnancies were available in 143 cases (120 deliveries, 23 spontaneous abortions). Fifteen deliveries (12.5%) were premature. Mean length of the conisation specimen was 9.38 (SD=4.56) mm for the delivery and 9.00 (SD=4.17) mm for the abortion group; mean period between conisation and conception (estimated by gestational age at delivery or age of abortus) was 445.8 (SD=362.4) days and 354.1 (SD=326.9) days respectively. Among delivered women, mean period between conisation and conception was 404.5 (SD=292.7) days for premature and 451.8 (SD=372.2) days for mature deliveries. Hypothesis testing failed to show statistically significant associations between outcome of
pregnancy and either depth of conisation or period between conisation and conception. Conclusions: This is the first attempt to describe the outcome of pregnancy after the conisation procedure in Estonia. The proportion of premature deliveries in the studied cohort was almost twice that of ETCH’s obstetric department overall figure. Although the study failed to demonstrate significant associations between pregnancy outcome and characteristics of precedent conisation, it showed trends regarding the period between conisation and estimated conception time, which we consider worth exploring further.

**FC21.03**

**The association between periodontitis, oral bacteria and umbilical cord inflammation and early preterm birth**

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Objective: To assess the association between maternal periodontitis, maternal oral microbiology results, umbilical cord microbiology and cytokines results, and early preterm delivery (ePTD). Material and Methods: Prospective case-control study done in the University Hospitals of Geneva, Switzerland. Cases were women delivering at 22-34 6/7 weeks and controls were women delivering at term. Women had an oral sample to detect bacterial RNA using the IAI PadoTest 4·5® and an umbilical blood sample to detect bacteria by culture and 8 cytokines levels. Periodontal examination was done at the immediate postpartum period. We performed univariate and multivariate logistic regression. Results: There was no association between the presence of bacteria in the umbilical cord and neither ePTD nor periodontitis. The levels of Porphyromonas gingivalis and Treponema denticola were higher in women with periodontitis compared to those without it [(mean 0.187±0.394 vs. 0.03±0.131, P=0.008) and (0.152±0.292 vs. 0.023±0.052, P=0.01)]. Those levels were also higher in women with ePTD, but the differences were not significant. Women with ePTD had higher levels of MCP1 than women delivering at term (332.7±43.2 vs. 194.9±9.6, P=0.002) and lower levels of IL1-RA (4064±996.5 vs. 6034±772.2, P=0.03). In multivariate analysis, ePTD was associated with MCP1 levels >350 (OR 14.02, P=0.001) and there was a trend for a higher risk when IL1-RA was <2000 (OR 3.23, P=0.06). Conclusions: The association between ePTD and periodontitis is due to the activations of the inflammatory cascade. The presence of specific bacteria in the mouth did not increase the risk of ePTD.

**FC21.04**

**Preterm birth: general and infection risk factors**

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We have revealed 900 pregnant women with preterm birth. Study of features of current and outcomes at virus and bacterial infections at the women, development of rational tactics of running of pregnancy, delivery at the women and newborn. The verification of the diagnosis was carried out in view of the data clinical and special methods of researches. The medical therapy directed on removal of symptoms most frequently to an observed pathology. We allowed to keep pregnancy at all women. virus and bacterial infections: virus hepatitis B and C, herpes, cytomegalovirus, chlamydia, HIV infection and followed them during pregnancy and preterm birth. At display of clinical symptoms of an infection to children carried out antivirus and symptom therapy, detailed virology research, with the subsequent supervision in dynamics. Thus, the creation of women dispensary system and organisation of newborn help and the choice of optimum obstetrics tactics with the virus-bacterial infections pregnant women are the necessary condition for the decrease of perinatal mortality and morbidity.
The possible way of prognosis of pregnancy complication
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Aims: Premature births are principal reason of high level of perinatal mortality and morbidity. Prognostication and warning of this pathology will allow will improve perinatal outcome. Methods: A definition of content α-2-microglobulin of fertility (Glycodelin), which is produced by endometrial glands and is considered as a possible marker of complications of pregnancy, the serum in 6 - 10 weeks of pregnancy and the threat of premature delivery in 22 - 26 weeks of gestation. Quantifying glycodelin in serum was conducted by ELISA. Study involved 69 patients, 10 applied for abortion at will, 20 with miscarriage that began, 19 with pregnancy that does not develop, verified by ultrasound, 20 pregnant with threat of preterm delivery in 22 - 26 weeks of gestation. Results: serum level of glycodelin in women with physiological pregnancy in 6 - 10 weeks amounted to 120.4 ± 6.85 ng / ml, with threat of pregnancy loss was reduced to 98.6 ± 3.45 ng / ml (p <0.05 compared with control and pregnancy that does not develop - 136.3 ± 7.35 ng / ml). With threat of early preterm delivery was observed to increase glycodelin 139.5±6.45 ng / ml (p <0.05 compared with control and risk of miscarriage in first trimester). Conclusion: Changes in production of glycodelin in pathological pregnancy in I and II trimesters are going in different directions. Determination of glycodelin serum for I and II trimesters is important non-invasive method of monitoring course of gestational process.

Assessing the effects of Progesterone by vaginal suppository to reduce preterm birth in women at risk
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Introduction and objective: preterm labor is the most important cause of neonatal mortality in the first 28 days of life in the world. Knowing that premature neonates are very susceptible to many complications. On the other hand it is too expensive to keep them alive; a suitable therapeutic method can lead to have a long pregnancy and a mature baby. Methods: Pregnant women between 24-34 week of pregnancy, who were at the risk of preterm labor, were randomly divided into two case and control groups. In the first visit their vaginal discharge were considered about trichomona, gardena, streptococ and gonorrhea, and treated if it was. In the case group Progesterone supp was administrated every 2days until the end of 34 week of pregnancy. In the control group betamimetics (syrp. Or tab salbutamol or tab isoxoprin) until the end of 34 week of pregnancy. After the following two groups and recording the time of delivery the data were analyzed in SPSS software. Results: According to this study there was not any significant relation between the average of age and weight, education and job, the average of delivery age, retard of delivery with preterm labor. Conclusion: According to this study we Conclude that there is no difference in the administration of Progesterone or tocolytic in decreasing the rate of preterm labor, and administration of these drugs depended on the related physician and condition.

Keywords: Progesterone suppository, preterm birth, women at increased risk

Changes in the amniotic fluid membranes composition as an indicator for its preterm premature rupture
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Objectives. The goal of this study is to search for new potential biomarkers (specific proteins and peptides) of preterm premature rupture of the membranes (pPROM) present in the amniotic fluid membranes. Materials and methods. The prospective study has been carried on at the Hospital of Lithuanian University of Health Sciences (Lithuania) from June 2008 till 2011. The investigative group of patients with confirmed pPROM underwent transabdominal amniocentesis under ultrasound guidance for the assessment of the
microbiological status of the amniotic cavity and pure amniotic fluids as well as blood samples for proteomics/peptidomics studies were collected. Several amniotic fluid membranes of the patients with pPROM and normal term deliveries were taken out for the peptide analysis after trypsin/chemotrypsin digestion. Peptidic maps were obtained by fully automated multidimensional liquid chromatography system with integrated on-line sample clean-up (SCX/RP/LC/MS) coupled to tandem mass spectrometry. Results. Totally fifty-three patients were included, seven with pPROM. We searched for peptides present in the amniotic fluid which are present in the pPROM membranes. The constructed system lets us to find peptides present in the amniotic fluid and the digested membranes in order to determine the relative abundance of these peptides to detect the early appearance of sensitive and specific peptide markers. The system is able to find up to several hundreds of peptides per sample in a range from 500 to 6000 Da. Conclusions. Comparison of generated peptide maps revealed potential differences in peptidic patterns, which are needed to be more deeply analyzed.

FC21.08
Delayed interval delivery of a second twin after the preterm labor of the first one in twin pregnancies
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A diamnionic dichorionic twin pregnant women (due to in-vitro fertilization) admitted to emergency department at 21th week of gestation because of regular contractions. By gynecological examination, we observed 8 cm dilated cervix with %80 effacement. Amniotic membrane was also bulging through cervix. After evaluation rapid delivery of the presenting fetus occurred, the baby’s weight was 610 gr and no heart activity was detected. Placenta of the first fetus expelled immediately. We decided to retain the second fetus to allow the improvement in the outcome. McDonald cerclage was performed and the patient treated with tocolytics, antibiotics and she was continuously monitored up to the 28th week of pregnancy. After she was discharged in 28th week, she controlled weekly in polyclinic. At the 36th gestational week, 101 days after the cerclage procedure, 3639 gr male fetus was delivered with cesarean section and had an uneventful neonatal course. Delayed-interval delivery is useful and acceptable therapeutic option for the management of the remaining fetus in twin pregnancies even after the expulsion of placenta. Antibiotic and tocolytics medication administration with cervical cerclage application can be associated with longer inter-delivery interval.

FC21.09
The value of maternal procalcitonin levels for predicting subclinical intraamniotic infection in preterm premature rupture of membranes
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Objective: To compare maternal plasma procalcitonin (ProCT) levels in preterm premature rupture of membranes (pPROM) and premature rupture of membranes (PROM) at term with their levels in healthy pregnant women, and to determine whether ProCT levels can be used for the prediction of subclinical intraamniotic infection. Materials and Methods: Thirty-two patients with pPROM, 35 with PROM at term, 24 healthy women at preterm gestation, and 30 healthy women at term were included. The mean plasma ProCT levels of the groups were compared. In pPROM group; using C-Reactive Protein (CRP) and white blood cell levels and the presence/absence of histological chorioamnionitis and neonatal infection as reference, ProCT levels were analyzed. Results: The mean ProCT level of the patients in pPROM group was significantly higher than PROM group and healthy controls. In pPROM group, the mean ProCT level of the patients diagnosed with histological chorioamnionitis (n=13, 40.7%) was found to be significantly higher than that of the remaining patients in the group. When the cut-off level was set at 0.0536 ng/mL, ProCT’s sensitivity in predicting histological chorioamnionitis was 92.3% while its specificity, positive predictive value and negative predictive value were 68.4%, 66.7% and 92.9%, respectively. Conclusions: ProCT levels were significantly higher in patients with pPROM. ProCT levels might be beneficial in determining patients with pPROM who require expectant management.
Objective: to evaluate the differences between outpatient and inpatient hysteroscopic polypectomy (HP). Materials and methods: seventy cases of endometrial polyps were identified by office hysteroscopy and were divided in 2 groups. In the first sample of patients we performed 35 outpatient HP using an Office continuous-flow Operative hysteroscope, equipped with bipolar electrodes and grasping forceps, through the vaginoscopic approach, without anaesthesia. In the second sample of patients we performed 35 inpatient HP using a monopolar resecting loop under general anaesthesia. All women underwent a six month-follow-up. Any differences and any complications were detected between procedures in the two groups. The mean intra-operative Visual Analogue Scale (VAS)(0-100 mm) pain score during outpatient HP was 19.3 mm (0-75). During the procedure the rate of patients without discomfort was 84.6% in the first group and 22.3% in the second group; 9% of women in the first group and 44.4% in the second one reported discomfort; 6.4% and 33.3% reported moderate pain. The day after HP, all women in the first group reported no discomfort while only 53.3% in the second group complained of discomfort. Results: no recurrence and no persistence of pathology occurred in both groups after six-month. Conclusions: nowadays, miniaturized hysteroscopes, equipped with bipolar electrosurgical system, allow to perform office-HP safely and successfully, without anaesthesia, while offering significant cost advantages and patients’ preference.

Endometrial polyp on ultrasound- is this diagnosis reliable in post menopausal women? A 6-year retrospective study

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Objective: Compare the ecographic diagnosis of endometrial polyp (EP) with the histologic result in post menopausal (PM) women. Materials and Methods: Retrospective review of the clinical records of all PM women submitted to office hysteroscopy from January 2005 until December 2010 (n= 1258) because of ecographic diagnosis (hospital and exterior ultrasound records) of EP and comparison with the histological definitive diagnosis. Results: 38% (n= 478) of PM women were submitted to hysteroscopy because of EP suspicion on ultrasound. Histology confirmed EP in 369 cases (77%): 93% benign EP, 4.6% EP + submucous myoma, 0.7% hyperplasic polyps, 0.7% of EP with focus of adenocarcinoma (ADC), 0.7% EP + complex endometrial hyperplasia and 0.3% EP + endometrial ADC. In 109 cases (23%) the histological definitive diagnosis did not confirm EP and revealed: 54.1% atrophic normal endometrium, 22% submucous myoma, 10.1% endometritis, 5.5% endometrial ADC, 3.7% complex hyperplasia, 3.7% cervix cancer and 0.9% sarcoma. Considering the premalignant/malignant pathologies (PMMP) found, in only 2 (over 24) of the cases there was PM bleeding. Conclusions: EP is a frequent hysteroscopy indication in PM women. The ultrasound misdiagnosed 24 (5%) cases of PMMP as benign EP. Probably, in PM women, it would be advised to do a double-check ultrasound with Doppler and eventual saline infusion sonography for endometrial and cervix evaluation, in a tertiary level hospital before hysteroscopy is performed, even in the asymptomatic cases.

Cervical pregnancy treated by uterine artery embolisation combined with office hysteroscopy

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Introduction: Cervical pregnancy is a rare form of ectopic pregnancy, it is a potentially life-threatening condition as the endocervix is eroded by trophoblast, and the pregnancy proceeds to develop in the fibrous cervical wall. The higher the trophoblast is implanted in the cervical canal, the greater is its capacity to grow
and cause bleeding. Because of its relative rarity, optimal treatment has not yet been elucidated for cervical pregnancy. Various conservative treatment modalities have been reported, however there have been no reports of the combined artery uterine embolisation (AUE) - hysteroscopic conservative treatment of cervical pregnancy. Materials and methods: From May 2009 to July 2011, five women with cervical pregnancies underwent angiographic uterine artery embolisation followed by hysteroscopic resection of trophoblast in an office setting (with no speculum and tenaculum and with no anaesthesia and sedation), by using a 5F bipolar electrode introduced through the operative channel of the hysteroscope. Results: This approach was uneventfully performed in all cases. The operating time ranged from 8 to 12 minutes. Blood loss was close to 0 ml. Length of hospital stay was 4 days and serum â-subunit of human chorionic gonadotrophin (â-hCG) levels declined to normal levels within 15 days for all patients, and all women recovered without complications. Conclusions: Our results show that combined AUE – hysteroscopic resection is effective, safe, and minimally invasive for patients with cervical pregnancy.

**FC22.04**

**Successful laparoscopic management of uterine rupture at 8 weeks of gestation: a case report**

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**Background:** Hemoperitoneum due to uterine rupture, in the first trimester of pregnancy is an uncommon but potentially life-threatening condition. Objectives: We present a case of uterine rupture at 8 weeks of gestation that has been managed laparoscopically. Methods: SV, A 38-year-old G2 P1 (II Gravida, I Para), previous Caesarean delivery since 18 months, has been admitted to the Obstetric Emergency Unit with diagnosis of spontaneous hemoaperitoneum during the 8th week of gestation. The patient presented with severe abdominal pain, decreased consciousness, and a reduced haemoglobin level. Initial ultrasound imaging showed significant hemoperitoneum. Urgent laparoscopic surgery was performed during which, aspiration of hemoperitoneum was carried out. A complete rupture of the anterior uterine wall was observed near the uterine Caesarean scar, with the embryo and chorionic tissues inside the pelvic cavity. Aspiration of the embryo and gestational tissues was performed and the uterine rupture was sutured laparoscopically followed by positioning of intraperitoneal drain. Results: Post operative course was un-eventful and the patient was discharged on the third day following surgery. Conclusion: Uterine rupture is a possible etiologic factor in hemoperitoneum during the first trimester. Prompt diagnosis and treatment are critical for improving outcomes. When surgical intervention is decided, laparoscopic approach should be considered.

**FC22.05**

**Laparoscopic injury of the obturator nerve during fertility sparing procedure for cervical cancer**

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Intraoperative injury of obturator nerve has rarely been reported in patients with gynecological malignancies who undergo extensive radical surgeries. Irreversible damage of this nerve causes thigh paresthesia and claudication. Intraoperative repair may be done by end to end anastomosis or grafting when achieving tension-free anastomosis is not possible. A 28-year-old woman with stage IB cervical cancer underwent fertility --sparing surgery including a conization and bilateral pelvic lymphadenectomy. Right obturator nerve was damaged intraoperatively during pelvic dissection. Immediate laparoscopic repair was successful and there was no functional deficit in the left thigh for 3 months postoperatively.
Operative treatment of endometriosis in Turku University Hospital in 2006 - 2010: incidence, age, indication, extent, approach and complications

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Objectives: The aim of the study was to analyze operations related aspects in endometriosis surgery in Turku University Hospital from 2006 to 2010. Materials and Methods: Turku University Hospital serves a population of approximately 250,000 and almost all of the endometriosis surgery in the area is performed there. We studied retrospectively the hospital records of operated endometriosis patients with ICD codes (N80.1- N 80.9) from 2006 - 2010. The incidence, age, indications and extent of surgery as well as peri- and postoperative complications of the patients were evaluated. Results: The mean age of the patients (N=390, annual variation 65 - 85) was 34.7 years (SD 7.6%). Main indication was dysmenorrhea (44-53%) followed by occult ultrasound finding (14-30%) and infertility (18-22%). Advanced surgery was performed in about one third of all (24-34% annually) with an increasing use of laparoscopic approach from 27% (2006) to 83% (2010). One ureter and one bowel lesion was observed in the 2nd and 7th postoperative day, respectively, and repaired. Other reoperation was needed for 1.8% (7/390) due to the postoperative abdominal bleeding and for 4 bowel leakages (1.0%) after anterior resection. Additionally, wound infections occurred in 5.6%, urinary infections in 3.6% and urinary retention in 3.3% of the patients. After all, 295 of 390 patients (75.6%) had not a single complication. Conclusion: Despite of the 3.3% rate of severe complications needing reintervention in this series we consider the rate quite low because one third of all patients underwent advanced surgery and majority of them were performed laparoscopically.

Office hysterectomy- what is menopausal women´s tolerance to pain? A 6-year retrospective study

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Objective: To evaluate the pain tolerance of post-menopausal women (PMW) during office hysteroscopy (OH) and it’s influencing factors. Materials and Methods: In this 6-year (2005-2010) retrospective study we analyzed the clinical records of 1023 consecutive PMW with pre operatory cervical priming (POCP) with misoprostol and compared the analogic pain scale (APS, 0-10) during OH without anesthesia with women’s characteristics, surgical technique (ST) and duration of the exam. Results: Women’s average age was 64 years (range 42-92) and 14,8% (n= 151) revealed intense pain (IP; score 7-10) on APS. The % referring IP was: 15,7% in ≤ 60 years old (YO) versus (vs) 15,1% in > 60 YO; 12% when operative time was ≤15 minutes (min), 15,6% when 15-30 min and 20% when ≥45 min; concerning the ST, 0% in the cervical polipectomies, 8% in the diagnostic hysteroscopies, 14,7% in the endometrial polipectomies (EP) and 18,9% in the hysteroscopic miomentomies (HM); in the surgical hysteroscopy sub-group (n= 793), when versapoint® was used, IP was detected in 14,2% vs 18,6% when it wasn’t. In 29 (2,8%) cases the exam wasn’t concluded because pain intolerance. No complications were detected. Conclusions: OH is a well-tolerated gold standard procedure to explore the uterine cavity. IP wasn’t superior in the eldest group neither when versapoint® was used, it increased with the exam duration and was more frequent in diagnostic vs surgical hysteroscopy (especially in the HM vs EP). Randomized controlled trials are needed to evaluate the influence of POCP with misoprostol in PMW on pain scale.

Cystoscopy a guide in management of small urogenital fistula

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Urogenital fistula, one of the frequent problems in developing world, is a distressing situation in women health. The western world and affluent nations have been able to eliminate the obstetric injury, resulting in VVF and have already seen its existence only in various operative procedures. Material: A total 47 cases of urinary fistula, reported from 1995 to 2010, and size 1 to 3 cm, of which were 37 vesicovaginal (78.72%), 9 ureterovaginal (19.14%) and malignancy and pure uterovasical one each was observed. Method:
Cystoscopy was done under LA to locate size, number, margin, distance from ureteric orifice, relation to bladder neck and its adherence and quality of tissue available for repair. The margins of fistula observed as Vascular with sharp margin, Less vascular with blunt margin, Scar and bladder mucosa fixed to underlying tissue. Ureteric catheterization or double J stent was inserted in various steps of repair procedure and the fistulas were repaired. 40 transvesical (86.10%), 4 extravesical (1.88%) and one with abdominal hysterectomy was followed by repair of VVF. Results: The size of fistula varied from 1 to 2.5 cm in diameter (with a mean of 1.45 cm and SD 0.025), margins with minimum scar free from underlying tissue gave good results in repair. Success rate on following transabdominal and Vaginal route were 95% and 50% respectively. Conclusion: Size of fistula < 2 cm in diameter gives good prognosis. Cystoscopy plays an important role in diagnosis and prevention.

FC22.09
Single-port versus three-port laparoscopic-assisted vaginal hysterectomy for benign or precancerous uterine disease
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Objectives: To compare the surgical outcomes between single-port versus three-port laparoscopic-assisted vaginal hysterectomy (LAVH). Methods: All consecutive patients who tried single-port (n=355) or three-port (n=544) LAVH for benign or precancerous uterine disease were included. Results: 355 and 544 patients tried single-port and three-port LAVH, respectively. Six and (1.7%) one patient (0.3%) in single-port LAVH group required additional ports and laparo-conversion, respectively, and each one patient (0.4% and 0.4%) in three-port LAVH group required additional ports and laparo-conversion (P=0.064). There were no between-group differences in age, menopause, parity, body mass index, and previous abdominal surgery, nor were there between-group differences in the diagnosis of uterine disease and uterus weight. There were no differences in operating time (120min vs. 119min, P=0.545), mean hemoglobin level change (1.4mg/dL vs. 1.4mg/dL, P=0.614), transfusion requirement (8.7% vs. 9.8%, P=0.596), and transfusion amount (2.5pints vs. 2.4pints, P=0.625). However, single-port LAVH group had significantly less estimated blood loss (110 vs. 135, P<0.001), less postoperative pain scores at POD 0 (4.9 vs. 5.3, P<0.001) and POD 1 (2.4 vs. 2.6, P=0.006), less analgesics requirement at POD 0 (23% vs. 46.8%, P<0.001) and POD 1 (23.6% vs. 41.6%, P<0.001), and shorter postoperative hospital stay (2.3days vs. 2.5days, P=0.005). Perioperative complications occurred in 12 (3.4%) and 23 (4.2%) patients of single-port and three-port LAVH groups, respectively (P=0.512). Conclusions: Single-port LAVH was as feasible as three-port LAVH. It was more minimally invasive surgery with more favorable operative outcomes in terms of estimated blood loss, postoperative pain, analgesics requirement, and hospital stay.

FC23.01
D-Chiro-inositol and its significance in polycystic ovary syndrome: a systematic review
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Background. The pathogenesis of polycystic ovary syndrome (PCOS) has been linked to the development of insulin resistance and hyperinsulinemia. The objective of this study is to investigate the effects of insulin sensitising agents such as D-chiro-inositol (DCI) on ovulation and insulin resistance in women with PCOS.
Methods. This was a systematic review done in an Academic Department of Obstetrics and Gynaecology in the UK of all studies published on PCOS and DCI up till May 2010. Patients were women with PCOS receiving DCI or where the relationship between insulin resistance and DCI had been investigated. Ovulation rates and changes in insulin sensitivity were the main outcome measures. Results. Less DCI-IPG was released in PCOS women compared to controls and this seems to correlate positively with insulin resistance and hyperinsulinemia evident in these patients. DCI administration had beneficial effects on ovulation, anthropometric and metabolic markers in PCOS women by enhancing insulin. The effects of metformin in improving insulin action in PCOS women was achieved through the release of DCI-IPG mediators. Conclusions. DCI seems to have a beneficial effect in women with PCOS in improving menstrual cycle, hirsuitism and insulin resistance. However, the scarcity of relevant studies and the small sample sizes used prohibit reliable conclusions to be drawn. Therefore, more studies must be conducted in the future to evaluate accurately the effects of DCI in PCOS.

**FC23.02**

**Effects of endogenous pituitary and sex steroid hormone levels on bone mineral density in healthy postmenopausal women**


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Objective: The aim of this study was to clarify the relationship between endogenous pituitary, sex steroid hormones and bone loss in healthy postmenopausal women. Methods: Serum concentrations of follicle stimulating hormone (FSH), luteinizing hormone (LH), estradiol, total and free testosterone, dehydroepiandrostenedione sulphate (DHEAS), sex hormone binding globulin, androstenedione and prolactin were measured and compared with bone mineral density (BMD) measurements of total femur (TF), femoral neck (FN) and lumbar spine (L1-L4) in 644 healthy postmenopausal Turkish women between 45 to 80 years of age. Patients were grouped as osteoporotic and non-osteoporotic according to the BMD measurements. They were further classified into two age groups, 45-59 years and 60-80 years. Student-t, Chi-squared test and logistic regression analysis were used. Results: Low serum level of DHEAS was significantly associated with osteoporosis in view of BMD measurements of FN, TF and lumbar spine before and after the age of 60. Low serum level of estradiol was significantly associated with osteoporosis in view of BMD measurement only in FN after the age of 60. We found no relationship between serum levels of other hormones and osteoporosis. Conclusion: Low serum content of DHEAS is associated with postmenopausal osteoporosis before and after the age of 60. Serum level of endogenous estradiol is only associated with osteoporosis after the age of 60. Postmenopausal hormonal replacement of these hormones benefits to prevent postmenopausal osteoporosis and bone fractures, but their adverse effects must be kept in mind during postmenopausal period.

**FC23.03**

**Does a combination of Chines herbs and acupuncture treatment affect sperm density in males with low sperm count? A pilot study**

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Introduction: Sperm quality is undoubtedly of the greatest importance in determining the quality of the developing embryo. Traditional Chinese Medicine (TCM) is known for already 3000 years as an efficient method for treating various health disorders. Materials and Methods: Patients: Study group consisted on 12 couples with male infertility, who failed to conceive in at least 3 previous ICSI attempts. The control group included 19 patients with male infertility who underwent 2 sperm analyses within a 40 days period of time, without treatment. Sperm analysis: Sperm samples were analyzed by light microscope (NikonE200) with sperm analysis chamber (Sperm Processor, India). Morphology of sperm cells was diagnosed according to WHO criteria using TestSimplest Kit (Diagonal, Germany). Analyses were performed before and after 40 days (39.58+9.3 days) of the combined acupuncture and herbs treatment. Results: Sperm Analysis -
Statistical analysis, using a paired T-Test did not revealed any change in the values of sperm concentration, motility (Fig 1) and pH before and after 22 to 57 (mean of 39.58±9.3) days of the combined treatment of Herbs and Acupuncture. However, a higher rate of normal morphology values was noticed after 39.58±9.3 days (14.17%±6.4 vs 26.58%±11.7, respectively, t11=-3.365, p<.006) (Fig2a). Additionally, a significant difference in was noticed in the volume of the ejaculate after treatment (1.5±0.56 vs 2.08±1.16ml; t11=-2.184 p<0.05; Fig2b). No change was noticed in the rate of normal forms in the control group (21.9%±10.4 vs 25.26%±10.29; Fig3) ANOVA for Repeated Measurements indicated a significant interaction (F1,29=4.467, p<.043)

Effect of folic acid on cardiovascular risk parameters in patients with polycystic ovarian syndrome

Objective: To determine the effect of folic acid usage on cardiovascular risk parameters in patients with polycystic ovarian syndrome (PCOS). Methods: A total of 170 patients with PCOS and 83 healthy women were enrolled. Group1: 100 patients with PCOS using 5mg/day folic acid for three months. Group 2: 70 patients with PCOS not using folic acid. Group 3: Healthy women. Serum levels of glucose, insulin, folic acid, apolipoprotein B, apolipoprotein A1, HDL and LDL, total cholesterol, triglyceride, homocysteine, follicle stimulating hormone (FSH), luteinizing hormone (LH), total and free testosterone, dehydroepiandrosterone sulphate (DHEAS) were measured. Bilateral carotid intima media thickness (CIMT) were measured. All measurements were repeated after 3 months. Patients having fasting insulin level >20µIU/ml and HOMA-IR > 2.5 were accepted as insulin resistance group. Independent t, Mann Whitney-U, paired samples t, Chi-square, Pearson and Spearman correlation tests were used. Results: There were statistically significant differences about the waist hip ratio, LH/FSH ratio, HOMA-IR index and serum level of homocysteine between the PCOS and control group. Patients with insulin resistance showed a significant decrease in homocysteine levels and CIMT values. Patients without insulin resistance showed no difference for homocysteine levels and CIMT values in group 1. Conclusion: In PCOS group, patients having insulin resistance showed decreased homocysteine levels and CIMT values as a result of increased level of folic acid. These results found by this study were important because of predicting cardiovascular diseases in early ages.
don’t correlate with obese, insulin resistance and hyperandrogenism in PCOS. Androgen might antagonize inflammation.

**FC23.06**

**Effects of endogenous hormones, serum lipid profile and insulin resistance on mammographic density in healthy postmenopausal women**

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Objectives: The purpose of this study is to evaluate relationship between serum contents of endogenous hormones, lipid profile and insulin resistance with mammographic density in postmenopausal women. Methods: Serum levels of follicle stimulating hormone (FSH), luteinizing hormone (LH), estradiol, total and free testosterone, dehydroepiandrosterone sulphate (DHEAS), sex hormone binding globulin (SHBG), androstenedione, prolactin, growth hormone (GH), insulin, insulin-like growth factor 1 (IGF-1), insulin-like growth factor binding protein-3 (IGFBP-3), total cholesterol (TC), LDL cholesterol, HDL cholesterol, triglyceride (TG) and fasting glucose (FG) and HOMA-IR values were compared with mammographic density of 644 patients between ages 48-76 years. Also menopausal period, body mass index (BMI), smoking and parity were compared with mammographic density. Mammographic density was measured by using computer assisted analysis of mammograms and mammographic results were classified according to Breast Imaging Reporting and Data System (BIRADS) into five groups. For statistical analysis, student-t and Chi-squared test were used. Results: High serum levels of LDL, GH, IGFBP-3 and values of HOMA-IR were significantly associated with increased mammographic density. We found no relationship between serum levels of FG, FSH, LH, estradiol as well as other sex steroids, SHBG, prolactin, IGF-1, HDL, TC, TG and mammographic density in addition to groups of BIRADS. We found no relationship between duration of menopause, BMI, smoking, parity and mammographic density.

**FC23.07**

**PCOD is a physiological adaptive reaction to prevent multiple pregnancies: studies on 10 large families and 44 single cases with PCOD with a mechanism guided approach**

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Objectives: Evaluation whether PCO can be a natural mechanism against the risk of multiple pregnancies (MP); developing a mathematical model on mediators controlling menstrual cycles. Materials and Methods: Ten large families + 44 PCOD cases were studied in three generations. Results: Based on the Hardy Weinberg law of population genetics, it is improbable that PCO with such a high frequency comprises a disease. Different hormonal controlling loops of reproduction can be simplified into a formula which encompasses a direct mediator from the ovaries affecting hypothalamus. This formula also explains psychological phenomena affecting fertility. Conclusions: 1. MPs in pre-midwifery era were uniformly fatal for mother, fetus or both. A gene with a frequency of 5-14% must harbor survival advantage for the patient or her offspring. Prevention of MP is the only explanation. 2. Unlike bone marrow ovaries do not have a stochastic mechanism and rely solely on suppression of nearby follicles by the dominant follicle. 3. Hypothalamus senses the risk of MP and adjusts pulsation of GnRH in the consecutive cycle by prolonging the low and postponing the high frequency pulsation. Continuation of MP risk for four consecutive cycles causes complete cessation of GnRH pulsation, stabilization of FSH and LH, anovulation and development of PCO pattern. 4. Infertility in PCO is relative and due to high risk of MP. A yet unknown ovarian mediator that informs the hypothalamus is responsible for reduced GnRH pulsation and blocking it will cure PCO in all patients compared to Metformin, Clomiphene or aromatase inhibitors (20-64%).
FC24.01
Pre-labour Caesarean section following IVF in older term nulliparous women: too precious to push?
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Objective. To compare prelabour caesarean section (CS) rates in older nulliparous women with a term singleton baby in cephalic presentation conceiving spontaneously and through IVF/ICSI. When the latter women would ask for CS, how willing are gynaecologists to comply with that request? Methods. A population-based retrospective (1995–2009) cohort study, conducted in Northern Belgium. A comparison of 1,866 nulliparous women pregnant after IVF/ICSI and 15,228 controls was made. An anonymous postal questionnaire was sent to all Belgian gynaecologists. Result. Study and control group were comparable with respect to maternal age (37.8y vs 37.3y), gestational age (39.5w vs 39.6w), and birth weight (3362g vs 3363g). Prelabour CS was more often performed in women who conceived through IVF/ICSI compared to those who conceived spontaneously (9.2% versus 6.3%, P< 0.001). One in five gynaecologists agrees with the maternal request. Conclusion. IVF/ICSI pregnancies in older nulliparous women more often ended in a prelabour CS and a substantial number of gynaecologists go along with a nonmedical reason for Caesarean section.

FC24.02
Women in labor with male fetuses have an increased risk for obstetric and neonatal complications
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Objective: To evaluate the effect of fetal gender on obstetric and neonatal outcomes. Materials and Methods: A prospective historical study between 2006-2010. Obstetric and neonatal parameters were retrieved from electronic medical records (EMR). Eligible for inclusion were women at 37-42 weeks, singleton, with a trial of vaginal birth. The study groups were: male newborns (Group A) and female newborns (Group B). Statistical analyses: descriptive and comparative as appropriate. Logistic regression model was build to evaluate the impact of newborn gender on maternal and neonatal complications (instrumental delivery, cesarean section, early postpartum hemorrhage, length of maternal hospitalization, 5’Apgar score<7 and NICU admission). Results: The EMR comprised of 56861 women; 54,139 (95.2%) were included in the study. The newborn male /female ratio was 1.04. The study groups were similar for maternal age, parity, previous cesarean section, induction of labor, length of maternal hospitalization. However, they differed significantly for prolongation of the second stage of labor (4.7% vs. 3.8%, p<0.001), instrumental delivery (6.3% vs. 4.5%, p<0.001), cesarean section (5.2% vs. 3.8%, p<0.001), postpartum hemorrhage (6.7% vs. 5.6%, p=0.007), macrosomia (8.1% vs. 4.1%, p=0.001), 5’Apgar < 7 (0.3% vs. 0.2%, p=0.02), and NICU admission (1.1% vs. 0.8%, p=0.008), respectively. The multivariate logistic regression model showed that male newborn gender was an independent risk factor for instrumental delivery (OR=1.3; 95% CI, 1.3-1.4), cesarean section (OR=1.3; 95% CI, 1.1-1.5), and NICU admission (OR=1.3; 95% CI, 1.1-1.4). Conclusions: The presence of a male fetus increases the risk for operative birth and subsequent neonatal complications.

FC24.03
Sharp versus blunt fascial incision at Caesarean section: a randomised trial with each case as own control
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Objective To compare patient preference of either sharp incision with scissors or blunt manual cleavage of the fascia at caesarean section (CS). Materials and methods Women undergoing primary CS (n=34) were randomized to side distribution of the surgical techniques (sharp right/blunt left n = 18, blunt right/sharp left n = 16) and followed 3 months postoperatively. Randomisation was computer-generated, with allocation
concealment by opaque, sequentially numbered sealed envelopes. Primary outcome was patient preference regarding side of the scar 3 months postoperatively - the sharp or blunt side or no difference. Secondary outcome was difference in pain between the two sides measured on a 0.0-10.0 analogue scale 1, 3, and 7 days and 1 and 3 months postoperatively. Participants and outcome assessors were blinded to group assignment. Results 28 cases were analyzed (sharp right/blunt left n = 13, blunt right/sharp left n = 15) and no significant difference was found in preference after 3 months. 9 preferred the sharp (32% [95% CI 16%-52%]) and 7 the blunt side (25% [95% CI 11%-45%]) (p = 0.804). Pain analogue scores did not differ significantly between the two sides at any time postoperatively either at rest or mobilization. Conclusions No significant difference was found in patient preference with regard to surgical technique used. Nor was there a significant difference in postoperative pain scores.

Trial Registration clinicaltrials.gov; Identifier: NCT01297725

**FC24.04**

**Administration of antibiotics prior to skin incision during Cesarean section**

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Objectives: To determine whether the administration of antibiotics prior to skin incision is superior to antibiotic prophylaxis given following umbilical cord clamping for the prevention of post cesarean infectious morbidity. Methods: This was a prospective, randomized study. Women scheduled for cesarean section were randomly selected for 2gr cephalosporin prior to skin incision or at the time of umbilical cord clamping. The occurrence of postoperative maternal and neonatal infectious morbidity were compared. Results: 400 women were enrolled in the study. 161 (40.2%) women received antibiotics 15-60 minutes prior to skin incision and control group 239 (59.8%) women - after cord clamping. There were no demographic differences observed between the groups including age (p < 0.5), BMI (p < 0.5), number of deliveries (p < 0.5) and indications for cesarean (p < 0.5). Postpartum endometritis occurred in five (5.6 %) women who have received antibiotics before operation to compare with 29 (12.2 %) control group women, (p <0.01) (RR = 0.25, 95% CI 0.15 -0.93). Fever after surgery had 5 (3.1 %) women versus 20 (8.4 %) control group, (p <0.02) (RR = 0.4, 95% 0.18- 0.87). There were no differences between to groups with regards to Apgar scale, umbilical cord Ph and BE and neonatal infectious morbidity. Conclusions: Administration of antibiotic prophylaxis prior to skin incision resulted in a decrease in both endometritis and total post cesarean infectious morbidity, compared with administration of antibiotics after the clamping of umbilical cord. Antibiotics administration prior to skin incision did not increase neonatal morbidity.

**FC24.05**

**Quality of operative vaginal delivery: analysis of the expected and observed symmetry of instruments**

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Objectives: The aim of this study was to analyze instrumental application’s symmetry during operative vaginal delivery according to obstetrical conditions and the operator’s experience. Materials and methods: We conducted a prospective multicentric observational study on operative vaginal delivery, successful or not, with at least one traction, between May and November 2011. After extraction, the operator filled a questionnaire and reproduced observed marks on a representation of the neonate’s head. Primary outcome was symmetry of these marks. Secondary outcome were position of marks when asymmetric, and their correlation with experience of the operator and obstetrical conditions. Results: We included 185 operative vaginal deliveries. Mean gestational age was 39.6 weeks of gestation. The average experience of the operator was 5.1 years (1-30). Forceps or spatulas, vacuum, or the sequence of two instruments were used respectively in 30.2%, 59% and 10.8% of cases. A cesarean was indicated for 3 patients. Discordance between fetal estimated position assessed clinically and position at birth was noted in 14.6% of cases. The instrument application was considered symmetrical in 92.4% of cases before birth, but marks were asymmetric in 47.6% of neonates. Symmetry at birth was correlated with operator’s experience (p=0.03).
Adverse outcomes were one respiratory distress, one subconjunctival hemorrhage and one neonate with subarachnoid hemorrhage and otorrhagia. All of them had asymmetric marks. Conclusions: Asymmetry in positioning of instrument for operative vaginal delivery is underestimated by operators. Experience of the operator seems to reduce asymmetry.

FC24.06
Treatment of the women operated by means of Cesarean section
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Research objective: optimization of the treatment of the women operated by means of Cesarean section. Materials and methods: 78 medical reports of deliveries were analyzed. Criteria of selection: a delivery in time; an anhydrous interval up to 14 hours; absence of an antenatal bleeding; an operation in the lower uterine segment; a wound restoration on a uterus with a single-row continuous suture; introduction of antibiotics after clamping of the umbilical cord. Postoperative anesthesia with nonnarcotic analgetics; feeding by adapted mixtures in 6 hours after the operation within 2 days, later a usual diet; drinks aren't limited; use of an isoosmotic solution (Macrogol) in 12-18 hours after the operation; early physical activation after the operation: turns in 1,5–2 hours; walking in a ward in 6 hours, full mobilization on the second day. Results: age of patients 30,7±1,6 years; volume of hemorrhage 488,9±23,24ml; duration of the operation 27±2,19 minutes. The results of the first and fifth-sixth days examinations: pulse 81,6±1,51 and 76,4±0,4 a minute; temperature 36,83±0,1 and 36,47±0,04°C; hemoglobin 115,9±4,07 and 117,9±4,28g/l; leucocytes 10,4±0,86 and 9,47±1,26×10⁹/g/l; neutrophils 10,5±0,73 and 9,4±0,92%. Control of restoration of the function of a gastroenteric tract: an active peristalsis over the whole area of a stomach; absence of augmentation of the volume of a stomach; an independent stool on the third-fourth days. Patients did not have any complications throughout all postnatal period. Conclusions: favorable outcomes at minimum use of medicines, reduction of workload of medical personnel performing procedures with unproved efficiency.
Surgery with preservation of organs are becoming more widespread. In women with infertility and having 'symptomatic' uterine myoma increased frequency of conservative myomectomy. The aim of this study was to evaluate the risk of uterine rupture after conservative myomectomy on subsequent pregnancy. Materials: In 2011 in our hospital were observed 558 women with uterine scar: 531 (95.2%) patient with uterine scar after cesarean, 24 (4.3%) pregnant women with a uterine scar after conservative myomectomy, 2 cases there was a scar after perforation of the uterus, and 1 pregnant woman - after the removal of the fallopian tube with excision tube angle. Results: In 2 of 24 (8.3%) observations after myomectomy scar on the uterus has failed: in one case there was spontaneous rupture of the uterus during pregnancy in term of 38-39 weeks. The diameter of the uterus rupture was about 4 cm with prolapse of membranes. The uterus was saved by timely diagnosis of this complication by ultrasound. Mother and baby were in good condition. The second patient showed a sharp thinning of scar up to 1 mm, and only the cesarean prevented uterine rupture. Conclusion: The presence of uterine scar after conservative myomectomy creates a high risk of uterine rupture during the pregnancy and the labour. When you remove fibroids in women of reproductive age should limit the use of electrosurgical hemostasis and impose of full value stitches in layers. Due to the complexity of diagnosing a scar during pregnancy, the method of choice during delivery should be Cesarean.
Amniotic fluid embolism (AFE) is a rare but one of the most catastrophic complications during pregnancy. There were 56094 and 55362 births in years 2009 and 2010, respectively. In 6 cases the fatal AFE occurred. Materials and methods: Analysis of 6 cases of AFE and comparison of possible cause and the course of AFE in these cases. Results: The average age of women by delivery was 32.3 years and the average gestational age was 40.3 weeks of gestation. The induction of labour was used in 4 cases and in 3 cases the oxytocin was administered. In 5 cases women delivered vaginally, in one case the vacuum extraction was used. Birth injuries were: 2x cervical and 2x vaginal wall laceration, 2x 1st grade perineal tear and 3x episiotomia. In 1 case urgent caesarean section and afterwards the hysterectomy was performed. All the newborns were female, in one case there was death fetus before delivery. The average newborns weight was 3485 grams. The most frequent 1st clinical symptom was nausea, agitation and tachycardia (3 cases). All the women died till the 36.63 hours (average 8.81 hours) from the onset of AFE. Conclusion: AFE is the lifethreatening complication of pregnancy. It is a rare complication and the obstetricians have only small experience with it. It is important to support the national registers and the obstetric survey systems, those collect the information about AFE and give more light in this diagnosis.

Postdelivery complications data analysis of hospitalised patients
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Objectives: To analyse the reproductive and clinical data of postdelivery complications patients. Materials and Methods: Retrospective - descriptive study analyzing data of 284 postdelivery complications cases hospitalized in „Lags – centrš” hospital from January, 2006 – January, 2011. Results: Median age of patients was 27.3 years. Reproductive data have shown that the number of pregnancies varies from one (48%) to thirteen (0.4%). 64% of patients were primiparous. 74% of cases were after vaginal delivery and 26% after cesarian section. Median number of days in hospital for our patients were 3 days. The most popular complaints were pain in the lower abdomen (36%) and fever (29%). Conclusions: During five year period the number of postdelivery complications has increased. Hospitalised patients with postdelivery complications usually are primiparous after vaginal delivery with complaints of fever and lower abdomen pain. The most common complication in our study is endometritis. Most sensitive laboratory marker for the diagnosis of puerperal infection is C-reactive protein. It is necessary to give more information to patients about normal puerperal period and what they should do in case of complications.
performed since the patient was allergic to Iodine. The patient needed hemotransfusion and painkillers. After two months the hematoma was drained, after which the diameter of the inhomogeneous formation was 4.5 cm. Results: There is no general consensus as to what is the best management plan for patients with retroperitoneal hematoma. Diagnosis is often delayed because of rare incidence and lack of specific visible symptoms. Our patient didn’t have any conducive to hemorrhage and therefore the first diagnosis was ovarian torsion or rupture and an operation was performed. Conclusions: Conservative management is one treatment option, but should reserved for patients who are in stable condition.

**FC25.04**  
**Post-partum acute respiratory failure – the purpose of a clinical case**  
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Objective: to review, from a clinical case, some of the causes of acute respiratory failure in pregnancy and the importance of it’s early diagnosis. Material and methods: patient’s clinical profile was retrospectively analysed. Results: we present a clinical case of a puerpera who developed acute respiratory difficulty in the first few hours after a cesarian delivery. She had had a twin-pregnancy and had been hospitalized due to moderate preeclampsia. The diagnostic and therapeutic approach are summarized here. Conclusions: acute respiratory failure is a rare complication of pregnancy. This patients are usually dyspneic and unable to speak in complete sentences. Confusion, somnolence, agitation, diaphoresis, and/or cyanosis are possible as well. The main causes are acute pulmonary edema and pulmonary thromboembolism, but others may be present.

**FC25.05**  
**Effect of controlled cord traction during the third stage of labour on postpartum haemorrhage incidence: a multicentre randomised controlled trial**  
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Objectives: The specific effects of each component of active management of the third stage of labour have not been adequately evaluated. Our objective was to assess the independent effect of controlled cord traction (CCT) on the incidence of postpartum haemorrhage (PPH). Methods: Randomised controlled trial conducted in five French university hospitals between January 1, 2010 and January 31, 2011. 4355 women aged ≥18, with a planned vaginal delivery, at a gestational age ≥35 by controlled cord traction (CCT) or by standard placenta expulsion (SPE) i.e. awaiting the spontaneous placental separation before helping its expulsion. Prophylactic oxytocin just after birth was administered in the 2 arms. The primary outcome was the incidence of PPH ≥ 500 mL as measured in a collector bag. Results: 4058 randomized women delivered vaginally and the primary outcome was recorded in 4013 (98.9%). The proportion of women with a measured postpartum blood loss ≥ 500 mL was not different in the 2 groups (196/2033, 9.6% in the CCT group and 206/2008, 10.3% in the SPE group, absolute difference 0.48% 95%CI (-1.37%; 2.34%)). The need for manual removal of the placenta was significantly lower in the CCT than in the SPE group (85/2033 4.2% and 123/2024 6.1%, respectively), as was the need for additional uterotonics after placental delivery (727/2030, 35.8% and 805/2024, 39.8%, respectively). No uterine inversion occurred. Conclusion: Controlled cord traction had no significant impact on PPH. However, this procedure is safe and associated with less manual removal of placenta.
Endodermal sinus tumor existing with pregnancy: case report

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Most common ovarian tumor detected during pregnancy is dermoid tumor. If we only concentrate on malign ovarian tumors in pregnancy; germ cell tumors and borderline ovarian tumors are predominate. Pregnancy complicated by endodermal sinus tumor of the ovary has rarely been reported; because of it’s rarity there is not an uniformly accepted management approach to these cases. We presented a twenty three years old pregnant woman which was found to have a right ovarian tumor at 35 weeks of gestation. At 38 weeks of gestation she underwent cesarean section combined with right oophorectomy; 2960 g alive, healthy female infant delivered and1800 g weight tumor excised. A diagnosis of primary endodermal sinus tumor of the ovary was detected by histological examination. 6 cures BEP (Bleomycin, Etoposide, Cisplatin) chemotherapy was planned in the 6th week of postpartum period. Before starting the chemotherapy, measurement of alfa fetoprotein was 3630 ng/ml. After the 4th cure of chemotherapy at 28th week of postpartum period, mediastinal lesion was detected. It was removed by cardiothoracic surgeons and according to pathological examination it was thymus hyperplasia due to chemotherapy rebound phenomenon. After 48 weeks of cesarean section, patient was under control without any metastasis and any clinical problem with an alfa fetoprotein level as 5 ng/ml. There is no established method for treating pregnancy complicated by endodermal sinus tumor of the ovary due to its extreme rarity, so management must be individualized for each patient.

Pregnancy and Zuclopenthixol

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Objectives: Psychiatric disorders were identified as the leading cause of indirect maternal death in 6th and 7th CMACE reports. An increasing number of patients with severe and chronic mental illness may become pregnant and complete their family life. There are no adequate data on the use of Venlafaxine and Zuclopenthixol in pregnancy. Materials and Methods: This is a case report of a patient with history of depression, bipolar disorder and schizophrenia. She was reviewed by the psychiatry and the perinatal mental health team at BHRUT Hospitals NHS Trust, Essex, UK. We collected the data from the online record and case notes review. Results: A 32 year old patient with a body mass index of 37.5 conceived spontaneously while on Venlafaxine 75 mgs BD, Procyclidine 10 mgs OD and weekly injections of 400 mgs Zuclopenthixol. She was unable to tolerate glucose tolerance test at 24 weeks of gestation. She had growth scans at 28, 32 and 36 weeks of gestation. She had an elective caesarean section at 39 weeks of gestation for extended breech presentation after failed external cephalic version. She delivered a male baby with birth weight 3.14 kilos. The patient was transferred to mother and baby unit postnataally. The baby was being followed up for hypospadiasis. Conclusion: The patient with severe mental illness requires a multidisciplinary approach with continuous input from the psychiatrist and community support team. Venlafaxine and Zuclopenthixol should not be administered during pregnancy unless the expected benefits to the patient outweigh the risks to the fetus.

Bakri balloon in vaginal-perineal hematomas complicating vaginal delivery: a new therapeutical approach

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Postpartum haematomas are potentially fatal complications of vaginal and perineal lacerations after delivery. In literature many conservative treatments are described to stop bleeding and to allow emptying of perineal haematomas, not always effective in avoiding major interventions. We report our experience in vaginal use of Bakri balloon as haemostatic device in a case of severe post-partum haemorrhage due to complicated vaginal-perineal haematoma not responsive to standard surgical treatments. In this paper we propose a new possible extension of Bakri balloon’s indications.

FC25.09
Central placenta praevia accreta, diagnosis and management - correlation of pre natal, peripartal and histological findings
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Background: With growing numbers of caesarean section deliveries there is a significant increase of pregnancies with abnormal placentation. These present severe risk factors of massive peripartal hemorrhage with all known adverse consequences. Transabdominal and transvaginal colour-doppler ultrasound and magnetic resonance imaging (MRI) are highly sensitive methods of detection. Timely antepartal diagnosis is crucial for adequate management of the pregnancy and delivery, lowering maternal morbidity and mortality dramatically. Our institute concentrates this type of risk patients. Methods: We present a case report of successful management of central placenta praevia after previous caesarean section. Second trimester ultrasound suspected abnormal placentation. Following sonographic features were described: irregularly shaped placental lacunae, thinning and absence of myometrium overlying the placenta, absence of decidual interface. After regular checkups and informed consent the patient was admitted to our institute at 29th week of gestation. For confirmation of the diagnosis we routinely use MRI. In axial and sagittal scans invasion of the myometrium at the lower uterine segment was revealed. Corticosteroids to induce lung maturation were administered afterwards. Results:The patient delivered an eutrophic fetus at 35th week of gestation by elective caesarean section. After ligation of hypogastric arteries placenta did not separate, so postpartal hysterectomy was performed. The surgical procedure, prenatal examination images as well as histopathological findings are included in our presentation. The mother and child were discharged from our institute 8 days after the surgery. Conclusion: It is possible to minimize risks of abnormal placentation significantly by early diagnosis and adequate surgical management and timing.

FC26.01
Implementation of an online fetal monitoring training program – evaluation and impact
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Objective: Since the introduction of electronic fetal heart rate monitoring about 50 years ago, the number of intrapartal asphyxia as the major cause for long term neurological damages has decreased drastically. Anyhow severe birth asphyxia followed by cerebral palsy has a constant prevalence of 2 in 1000 births. So the aim of appropriate clinical risk management has to be a continuous presence of staff with a good knowledge of cardiotocography. Based on those findings regular trainings of CTG interpretative skills are recommended for obstetricians and midwives (Maternal and Child Health Research Consortium. CESDI 7.Annual Report, RCOG Press, London, 2000). Methods: In 2011 the training program “K2 Fetal Monitoring Training System” (K2 Medical Systems, Plymouth, UK) has been implemented at the department of obstetrics and gynecology, Medical University Graz. In a prospective trial participants were asked to self-assess their CTG interpretative skills and knowledge on fetal acid-base status and confidence in handling fetal monitoring parameters before and after attending the trainings software (17 questions, scale 1-10). Results: First results show an increase of knowledge and confidence in all categories. Knowledge of acid-base balance under labor and regarding influence of pathologic FHR pattern on acid-base status increased from 6.76 to 8.83 (p=0.015) and 6.88 to 8.5 (p=0.021), respectively. Median overall satisfaction was high (8.6). Conclusion: The use of computerized teaching program increases knowledge and safety in management of fetal monitoring. It may help to prevent adverse labor outcomes. Further analyses of incoming data for final conclusions are required.
FC26.02
Uterine artery embolization for life-threatening haemorrhage from cervical cancer in pregnancy
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Introduction: Cervical cancer is considered the most common cancer diagnosed during pregnancy. Although treatment guidelines for non-gravid patients are well defined based on several randomized trials, there is a lack of evidence to support a standard therapy in pregnancy. When an emergency condition, such as massive haemorrhage from the tumour, is present the cervical cancer management during pregnancy represents a challenge for the physician. Materials and methods: We present a case of a 34-year-old woman, pregnant at 7.6 weeks, referred to our department with massive vaginal bleeding from an exophytic Ib2 FIGO stage, grade 3 tumour of the cervix. Angiographic uterine artery embolisation was performed in order to stop bleeding and to have time for planning the best treatment. Active cardiac motion of the embryo was no more detected after embolisation. The patient received three cycles of neoadjuvant chemotherapy and a radical hysterectomy with pelvic lymphadenectomy. Results: After two years of follow up the patient is disease free. Conclusions: Transcatheter arterial embolisation is a safe and effective treatment for vaginal bleeding in diverse clinical settings, such as bleeding due to gynaecological malignancy during pregnancy.

FC26.03
An audit of elective Caesarean section and introduction of generic elements of enhanced recovery in obstetric settings
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Objectives: To Audit the recovery of patients undergoing elective LSCS at RHC Hospital Winchester and use results to implement generic elements of Enhanced Recovery(ER) for Elective LSCS Materials and Methods: A Case review audit of 40 patients having elective LSCS was carried out. The results were used to design the project of ER for elective LSCS. Results and Conclusion:
• 6% of patients had Hb<9.5 gm/l and 15% had Hb<10.5 gm/l on the day of delivery
• Only 22% patients were reviewed by an obstetrician
• Wide variance in post-operative analgesia was found
• 99% of patients had catheters removed and mobilized the next day after LSCS
• 29% of patients were discharged home within 48 hrs, 51% patients were discharged home between 48-72 hrs after LSCS with no medical indications for the longer stay The results clearly show the scope of improvement and it can be achieved by introduction of ER. ER project will include pre-operative optimisation of Hb, ensuring optimal health of mother and child by minimising the risk of PPH, delayed cord clamping, early nutrition, mobilisation and daily medical review. Patient information and patient participation will be improved by introduction of a patient diary and information leaflet. We submitted our project of ER for an award of £5000 announced by Health Authority towards introduction of ER in a new discipline and we won the award. We are starting to bring patients through ER from Jan2012.

FC26.04
Placental abruption in Tunisian population: clinical characteristics and prognosis
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Aim: To determine clinical characteristics and outcomes of placental abruption in a Tunisian population. Methods: Retrospective study at the a University Hospital in Southern Tunisia including 68 cases of placental abruption from January 1st 2007 to June 30th, 2009. Results: During the study period there were 22956 deliveries. The placental abruption represented 0.296% of deliveries. Mean age was 31 years. Mean parity was 2; multiparity was noted in 14.7% of the cases. A history of placental abruption was noted in 2.94% of cases, spontaneous abortions in 16.7%, intrauterine fetal death in 5.88% and pre-eclampsia in
7.37%. In the current pregnancy, preeclampsia was noted in 23.52% of cases, premature rupture of membranes in 10.27%, preterm labor in 42.6%, hydramnios in 5.88% and placenta praevia in 2.94%. The diagnosis was suspected clinically in 13.23% of cases, echographically in 70% and was fortuitous in the remainder. 67.64% of placental abruptions were grade III by Sher’s classification. Fetal evacuation was performed by caesarean section in 91.17% and by vaginal delivery in 8.82% of cases. Maternal Complications were postpartum hemorrhage in 23.52% of cases requiring hysterectomy in one case, and an acute renal failure in 23.52%, however, no maternal death was reported. Perinatal mortality was 47.23% of cases and was correlated to prematurity in 73.68% of cases. Conclusion: The incidence of the abruptio placentae appears to be relatively low in this “real world” unselected Tunisian series. It was, however, associated with very bad outcomes with high rates of maternal complications and perinatal death.

**FC26.05**

**Vitamin D, calcium and phosphorus status of pregnant women and their newborns in West Iran**

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Background: Vitamin D deficiency during pregnancy has important implications for the newborn and infant. There are a few data from Iran about the prevalence of hypovitaminosis D in pregnant women and in their newborns. Our aim was to determine the prevalence of Hypovitaminosis D in pregnant women and in cord blood of their newborn and we want to evaluate correlation of maternal 25(OH) VitD, serum calcium, and serum phosphorus concentrations with cord blood samples belong to their newborns. Design: Serum calcium, serum phosphorus, and 25(OH) Vit D was studied in 193 pregnant subjects between 16-45 years of age in third trimester admitted in Be´sat hospital. And serum calcium, serum phosphorus and 25 (OH) Vit D were measured in the cord blood of 193 newborns belong to them. Our study is longitudinal. Result: Mean maternal serum 25 (OH) Vit D was 16.5 ± 14.2 ng/ml,. pregnant women (57%) had 25 (OH) Vit D values below that cutoff. About seventy six percent (67.2%) of newborns had 25(OH) Vit D values below that cutoff. Maternal serum 25(OH) Vit D correlated positively with cord blood 25(OH) Vit D . mean maternal serum calcium is 8.89 ± 0.73 mg/ml and mean newborn serum calcium is 9.46 ± 0.93. Conclusion: we observed a high prevalence of significant hypovitaminosis D of pregnant women and their newborns. Our study observed the need of majority of pregnant women and their newborns to supplemental vitamin D, the magnitude of which warrants public health intervention.

**FC26.06**

**Effect of Oronasopharyngeal suction on arterial oxygen saturation in normal, term infants delivered vaginally - a prospective randomized controlled trial**

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Background: The purpose of this study was to compare the effects of Oronasopharyngeal suction (ONPS) with those of no suction in normal, term newborns delivered vaginally. Material and Methods: A total of 170 healthy term infants of first and single uncomplicated pregnancies, with clear amniotic fluid, vaginal delivery and cephalic presentation, enrolled in the trial. Newborns were randomized into one of the two groups according to the use of ONPS procedure. Arterial oxygen saturation (SaO2) levels, heart rates, blood gases of umbilical cord and Apgar scores were determined. Results: The mean SaO2 values through the 1st and 5th minutes of birth were similar in two groups. The maximum time to reach SaO2 of ≥ 92% was shorter in the no suction group. There were no statistically significant differences in the mean of heart rates, respiratory rates and Apgar scores between groups. Apgar scores at 5 and 10 minutes were between 8 and 10 for all infants. Newborns receiving suction showed a statistically significant, lower mean partial carbon dioxide pressure (PCO2) and a significantly higher partial oxygen pressure (PO2) of umbilical artery. Conclusion: Although, findings remained on statistical level, these were not considered clinically significant because values remained within normal ranges. According to this study, ONPS is not recommended as a routine procedure in normal, term infants delivered vaginally.

Key words: Oronasopharyngeal suction, Oxygen saturation, Neonate, Vaginal delivery
**FC26.07**

**Effect of postpartum home visiting on satisfaction of Iranian low-risk mothers and their perception of the importance of postpartum care**

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Objectives: to investigate the effects of home based postpartum care on satisfaction and perception of Iranian low-risk mothers compared with routine governmental care. Materials and methods: A Randomized controlled trial that conducted on two hundred mothers at Akbarabad primary health care center, a reference center for screening infant hypothyroidism in Tehran. Mothers were randomized to either home-based (n=100) or routine-based postpartum care (n=100). Each mother and her neonate were assigned 4 care periods: 2 for the mother and 2 for the newborn. Home-based cares were provided by a midwife in intervention group. Postpartum and postnatal cares in control group were provided by primary health care system of ministry of health of Iran. Result: The mean differences of two groups in contents of satisfaction and perception of mothers for emotional and communicational services were 9.05 (P<0.001) and 1.75(P=0.007), respectively. These values for educational services were 15.75 (P<0.001) and 2(0.017). Conclusions: postpartum home visiting had a meaningful positive effect on satisfaction and perception of intervention group mothers compared with routine governmental care in control group.

**FC26.08**

**Influence of the obstetric intervention on maternal and neonatal outcomes: a comparison between planned vaginal deliveries in a low-risk obstetric population.**

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Background: This study aimed to compare intervention deliveries with normal deliveries with respect to neo-maternal outcomes. Methods: In this prospective cohort study, 169 women aged 18-35 year with a term and low-risk pregnancy were investigated in two intervention (n=85) and control (n=84) groups. The two groups were matched for age and parity (the confounding variables). All participants had a same care and were observed from admission time, during the labor, to the first hour after the delivery. The intervention group received five routine interventions including augmentation or induction of labor with oxytocin, amniotomy, external electronic fetal heart rate (FHR) monitoring, and restrictions on eating, drinking, and moving during labor. The control group had none of the mentioned interventions. Women with interventions other than the above were excluded. Results: Our findings indicated that FHR abnormalities during labor (P=0.009), the mean time for onset of breastfeeding (P<0.001), rate of cesarean delivery (P=0.03), and cases of episiotomy (P<0.01) was significantly higher in the intervention group. The two groups were the similar in 1- and 5-minute Apgar score, and need for admission in neonatal intensive care unit. Conclusion: With regard to the adverse consequences of routine obstetric interventions, these should be undertaken only in cases with a known medical indication and be avoided in the case of routine.

Keywords: Obstetric Deliveries, Cesarean Section, Pregnancy Outcome, Natural Childbirth, Peripartum Period, Midwifery/methods

**FC27.01**

**Surgical management of a pelvic abscess following transvaginal oocyte collection for in vitro fertilisation**

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Objectives: A case report discussing pelvic abscess formation following IVF. Methodology: A literature search was undertaken to identify all relevant published literature. Results: A 41 year old nulliparous patient, with known endometriosis, presented with lower abdominal pain, bloating, nausea and backache 6 days post trans-vaginal oocyte collection. At presentation she was febrile, with raised inflammatory markers. A transvaginal scan revealed a large, poorly marginated, complex right adnexal cystic structure, in keeping with a tubo-ovarian abscess (TOA). Initial management was conservative whilst awaiting pregnancy
confirmation. 12 days later a pregnancy test was negative and the TOA had increased in size to 71.25×66.23×73.55mm. The decision was made for surgical management, initially laparoscopically, which was converted to open due to the extensive nature of the adhesions. The bowel adhesions were removed and a right salpingectomy and abscess drainage were performed as a joint procedure with the general surgical team. Histology confirmed the presence of chronic salpingitis and abscess formation. Conclusions: Complications following ultrasound guided transvaginal oocyte collection are rare, but include bleeding, pelvic infection and damage to other pelvic/abdominal organs. Rates of severe pelvic inflammatory disease and pelvic abscess formation following oocyte collection range from 0.2-0.3%. It is hypothesized that the infection is caused by direct inoculation with vaginal organisms during the procedure and that a history of previous pelvic inflammatory disease or endometriosis increases the risk. There may be a case for a course of broad spectrum antibiotics following oocyte retrieval in these patients, rather than a stat dose of oral antibiotics.

**FC27.02**
**Local anaesthetic and midline incisions**
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**Introduction:** The administration of local anaesthetic at laparotomy is a widely used technique aimed to reduce patients’ pain in the immediate postoperative period. There have been multiple studies performed to assess this procedure for gynaecological surgery but results remain equivocal. Opioids are commonly used in the management of postoperative pain but these are associated with unwanted side effects such as sedation, nausea and reduced bowel motility, all of which may hinder a patient’s recovery from surgery.

**Objective:** The aim of this study was to compare the effect of rectus sheath administration of levobupivacaine with wound infiltration and their effects on postoperative pain scores and morphine requirements.

**Methods:** This was a prospective randomised controlled trial of 41 women undergoing midline laparotomy for both benign and malignant gynaecological disease. Patients were randomised to receive 40mls of 0.5% levobupivacaine to either the rectus sheath or infiltration to the subcutaneous layer at the wound site.

**Results:** Overall total pain scores and postoperative morphine requirements were less in the group that received local anaesthetic to the rectus sheath, however these results were not statistically significant.

**Conclusion:** The administration of local anaesthetic to the rectus sheath following midline laparotomy does not reduce postoperative pain scores or morphine requirements, relative to local anaesthetic wound infiltration.

**FC27.03**
**Relationship between metabolic syndrome and bone mineral density in the postmenopausal women**
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**Objective:** This study examined the relationship between MtS and bone mineral density (BMD) in postmenopausal women. Methods: We divided postmenopausal women who visited St. Vincent Hospital of the Catholic University of Korea in 2006 and 2007 into groups with and without MtS and measured their body mass index (BMI), waist–hip ratio (WHR), blood pressure, serum fasting glucose, lipid profile, and BMD of the lumbar spine and femoral neck. Results: Of the 151 subjects, 66 (43%) had MtS and 85 (57%) did not. The women with MtS had a higher BMD at the lumbar spine and femoral neck (p=0.027, p=0.031, respectively), although after adjusting for age and BMI, this correlation was lost (p=0.276, p=0.425, respectively). Significant positive correlations were observed between BMD of the lumbar spine and both HDL cholesterol and serum fasting glucose (p=0.041, p=0.012, respectively), and BMD of the femoral neck was positively correlated with serum fasting glucose level(p=0.029). And these relationship does not changed after adjusting for BMI and age. But, most another components of MtS were not correlated with BMD. Conclusion: In our study, the association of MtS with higher BMD was explained by their higher BMI. And only two components ( HDL, SFG) of MtS showed positive correlation with BMD. So, we
suggest that MtS has not protective effect on postmenopausal osteoporosis. Furthermore, large clinical studies are necessary to clarify that MtS is another risk factor for postmenopausal osteoporosis.

**FC27.04**

The introduction of school-based sexuality education and youth sexual health services: case study from Estonia

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Objectives: In 1996 new school curriculum was introduced in Estonia including for the first time mandatory sexuality education lessons integrated in a compulsory subject Human and Civil Studies. First youth counselling services addressing sexual health matters were set up in 1991-1992 and have resulted in 20 counselling centres by 2010. The objectives of this study are: a) to determine whether changes occurred in young people’s sexuality-related knowledge and behaviour during 1992-2009; b) to determine the cost-effectiveness of introducing and offering compulsory sexuality education at basic schools. Materials and Methods: The results of 12 population-based surveys and information from the national databases of health indicators were examined. Additionally, a study was undertaken by Radboud University (Netherlands), commissioned by UNESCO, to determine the cost of offering sexuality education, compared with the savings from poor reproductive health outcomes averted. The sexual health outcomes were grouped together into health events, i.e., unwanted pregnancies, STIs, and HIV infections. Results The surveys on knowledge and behaviour show that knowledge has improved, condom and modern contraceptive use has increased and teenage abortion and STI/HIV infection rates have decreased substantially during the study period. The study on cost-effectiveness shows that sexuality education was highly cost effective. The cost of averting one health event ranges between 555 USD and 1,664 USD, depending on the scenario used. Conclusions Introduction of mandatory school-based sexuality education, in combination with youth-friendly sexual health services, led to an increase in contraceptive use, improved health outcomes, and savings for the government of Estonia.

**FC28.01**

Induction of labour and its outcome

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Objective: To audit the practise of induction of labour and the outcome in comparison to the spontaneous labour and to evaluate maternal and perinatal outcomes. Materials and methods: Labor may be induced because of maternal indications (for example, diabetes mellitus, hypertensive disease of pregnancy, etc.) or fetal indications (for example, prolonged pregnancy, nonreassuring results on antenatal testing, intrauterine growth restriction, etc.). In this prospective study was included all pregnant women “at term” induced during a six months period between July 2011 and December 2011 in the University Hospital of Obstetrics and Gynaecology “Koço Gliozheni”. Results: The overall induction rate resulted 20.8%. The commonest indications for induction were premature rupture of membranes 27.4%, prolonged pregnancy 26.2%, pregnancy induced hypertension 12.5%. The vaginal delivery rate was 68.6% in the induced labour group compared to 78.4% in the spontaneous labour group. The mean induction to delivery interval was 18.4 hours for primiparous women, 9.8 hours for multiparous women. The instrumental delivery rate of 9.3% in the induced group compared to 6.8% in spontaneous labouring group. The caesarean delivery rate was 19.7% for induced group compared to 13.3% in spontaneous group. Maternal complications in induced group included higher rates of perineal laceration, need for uterotonic agents, and increased need for anaesthetic procedures comparing to spontaneous labour group. Also, adverse perinatal outcomes were higher in induced group including low Apgar score, admission to NICU and delayed initiation of breastfeeding.
Placenta praevia: analysis of 363 cases from 2004 to 2010
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Objective: To evaluate the incidence of placenta praevia during the period 2004-2010 and to analyse the characteristics of women with this condition. Materials and Methods: We carried out a retrospective study among 58,742 women who delivered at the S. Anna University Hospital, Torino, between January 2004 and December 2010. The hospital charts of women with placenta praevia were analyzed and the following characteristics were studied: maternal age and gestational age at delivery, parity, previous uterine surgery, twin pregnancies, medically assisted reproduction and need for haemostatic hysterectomy. Results: 363 patients (0.61%) had placenta praevia and the overall incidence increased significantly from 0.56% in 2004 to 0.77% in 2010 (p=0.05). This increase was not related to maternal age, which remained at a stable average of 35 years over time. Moreover, this increase was particularly evident in multiparous women (p=0.05), perhaps due to previous uterine surgery. In effect, from 2004 to 2010 the incidence of previous uterine scars in patients with placenta praevia showed an increase from 14.28% to 21.67%, C-Sections representing 93.7% of all surgical interventions. Over the study period there was an increased incidence of placenta praevia, associated with medically assisted reproduction (from 4.1% to 13.3%) and twin pregnancy (from 2.0% to 6.7%). The number of placenta praevia requiring haemostatic hysterectomy increased from 2.0% to 6.6% over time and 61.1% of them were placenta accreta at histological examination. Conclusions: The incidence of placenta praevia has significantly increased over time and appears to be mainly related to previous uterine scars, medically assisted reproduction, and twin pregnancy.

Is external fetal heart rate monitoring similar to internal monitoring during the second stage of labour?
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Introduction: Continuous fetal heart rate (FHR) monitoring during labour can be performed using an external Doppler probe or a scalp electrode. In this study we compared computer analysis of signals acquired in the same fetus by the two methodologies, in the last minutes before delivery. Materials and Methods: External and internal monitoring were used simultaneously in consecutively recruited labouring women with singleton uneventful pregnancies, in the last 40-60 minutes before vaginal delivery. Cases were included in the study (n=33) if the interval between tracing-end and birth was <5 minutes, if normal Apgar scores and umbilical cord blood gases were recorded, and there was <15% signal loss. Tracing analysis was performed using the Omniview-SisPorto® system. Paired sample T-test and Bland-Altman limits of agreement (LoA), were used for statistical analysis, setting significance at 0.05. Results: A higher signal loss was observed with external monitoring (10.2% vs. 4.4%; p<0.001, LoA=[-6,18]). No differences were found in mean FHR baseline (128.6 bpm vs. 130.1 bpm, p=0.245, LoA=[-15,12]), and percentage of abnormal long-term variability (1.2% vs. 1.1%, p=0.912, LoA=[-6,6]), but more accelerations (11.5 vs. 7.8, p<0.001, LoA=[-5,13]) and less decelerations (7.6 vs. 9.8, p<0.001, LoA=[-23,16]) were seen with external monitoring. This resulted in a lower duration of computer alerts (13.6 min vs. 17.2 min, p=0.049, LoA=[-8,4]). Conclusions: Care must be taken with external FHR monitoring in the last minutes of labour, as it is associated with higher signal loss, greater identification of accelerations, less identification of decelerations, and reduced occurrence of computer alerts for tracing abnormalities.
Objective: Pregnancies in women older than 40 years are increasing markedly in Western countries. The purpose of our study was to evaluate pregnancy outcomes in women at extremely advanced maternal age (≥45 years). Materials and Methods: Between January 2004 and December 2010, we carried out a case-control study comparing singleton pregnancy outcomes in patients older than 45 years, with outcomes in three control groups consisting of women between 20-29, 30-39 and 40-44 years. Results: 58,744 women delivered during the study period and 179 of these women were ≥45 years. Eighty of them (44.7%) were nulliparae. Mean birth weight of newborn from older women was lower than that among controls. Gestational age at delivery was significantly lower among older nulliparae (37,75±2,34SD), and multiparae (37,58±2,8SD) in comparison with controls. Older women were at increased risk for cesarean delivery compared with the 20-29 years old control group (p≤0.005 OR 11,24). The rates of gestational diabetes mellitus (11,73% vs 2,79% for 20-29; p≤0.005 OR 4,63), hypertensive complications (13,96 % vs 5,02% for 20-29 and 30-39; p≤0.005 OR 3,07), and preterm delivery at ≤34 weeks of gestational age (for 20-29 p≤0.005 OR 2,24) were higher in the study group as compared with the specified control groups. Conclusion: Pregnancy at extreme advanced maternal age is associated with an increased maternal and fetal risk, especially for nulliparous women. Although maternal morbidity increased, the overall neonatal outcomes did not appear to be affected.

Pelvic inflammatory disease: a diagnostic algorithm

Objective: To design a diagnostic tool to optimise the management of women with acute pelvic inflammatory disease (PID). PID carries significant morbidity in the female population. The sequelae are well documented, as is the need for prompt antibiopic treatment. PID is frequently a diagnosis of exclusion in women of reproductive age presenting with an acute abdomen and management is often implemented prior to the availability of definitive objective evidence. Reducing the incidence of sequelae in the “affected”, should be balanced by consideration of stigmatisation of the “unaffected” by an incorrect diagnosis. Furthermore, inappropriate administration of antibiotics contributes to increasing bacterial resistance. Development and implementation of a diagnostic algorithm would optimise management. Method: We reviewed the case notes of 65 patients, presenting between 2006 and 2011, whose differential diagnosis included PID. We excluded cases where alternative diagnoses were subsequently made. Cross-referencing was performed to identify additional cases from positive genital swabs, as indicated from the microbiology database. Using a proforma, we audited the remaining cases for documentation of recognised objective diagnostic criteria for PID (clinical, biochemical and microbiological) and analysed these for recurring characteristics of confirmed cases. Results: Pending. Conclusions: Through retrospective analysis of trends in the diagnostic criteria of patients treated for PID we developed an algorithm which could optimise the process of diagnosis and management of the condition. Further studies will audit the impact of implementing this tool on our service. We anticipate that such a tool would prove beneficial to other obstetric and gynaecology units in the UK.
A comparison of triple tourniquets and ovarian artery clamps to control bleeding at open myomectomy
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Introduction: Despite technical advances, open myomectomy remains the principal treatment for multiple, large uterine fibroids when preservation of fertility is desired. Intra-operative bleeding is the main risk of surgery. Studies have shown that devascularisation using triple tourniquets is the most effective technique for limiting bleeding. We recently developed a clamp which avoids ovarian ischaemia associated with the classic triple tourniquet technique. Objective: To compare operative blood loss at open myomectomy when using triple tourniquets (Group A) with ovarian clamps plus a pericervical tourniquet (Group B).

Methods and patients: We reviewed the clinical records of 171 women with symptomatic fibroids who underwent open myomectomy between September 2004 and November 2011 under the care of the senior author. Results: The two groups were similar in baseline characteristics. There were no statistical differences between the groups in terms of median uterine size (Group A: 19 weeks, Group B 18 weeks) and number of fibroids removed (Group A: 15.5, Group B: 14). Although the median intra-operative blood loss was higher in the Group B (500 ml vs 400 ml, p = 0.058), this was explained by the higher weight of the fibroids removed in this group (625 g vs 473 g, p = 0.026). Conclusion: The average blood loss of 500 ml with ovarian artery clamps and pericervical tourniquet at open myomectomy compares favourably with the use of traditional triple tourniquets. As ovarian artery clamps have the advantage that intra-operative ovarian ischaemia is avoided, we consider this technique should be used in preference to triple tourniquets to limit bleeding at open myomectomy.

Critical care in obstetrics and gynaecology: an audit
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Objectives: To analyse the obstetrics and gynaecology (O&G) admissions from the Liverpool Women’s Hospital to the ICU at the Royal Liverpool University Hospital to investigate the reasons for transfer and ICU outcomes. Methods: Suitable patients between 2003–2011 were identified through the ICU admissions book. A proforma was devised for data collection, and audit approval was gained. Results: Sample size was 23 (11 obstetrics, 12 gynaecology cases). The average ages were 32 (obstetrics) and 66 (gynaecology) years. The average APACHE II scores were 10 (obstetrics) and 18 (gynaecology). One obstetric and 10 gynaecology patients had co-morbidities. The commonest reasons for ICU transfer in obstetrics included haemodynamic instability and respiratory compromise. ICU interventions included ventilation, circulatory support, haemofiltration and plasmapheresis. Within the gynaecology sample, 11/12 were surgical patients, with 5 undergoing a second procedure due to post-op complications. The commonest reasons for transfer included haemodynamic instability, and respiratory compromise. ICU interventions included airway and circulatory support. One patient underwent a further operation. The average length of stay (days) was 3 in obstetrics and 9 in gynaecology. Conclusions: Results showed lower APACHE II scores in the obstetric patients. Main reasons for transfer were PPH in obstetrics and post-operative bleeding in gynaecology. The results have also highlighted the ICU interventions and outcomes. This information will aid the O&G team in knowing when to refer patients, and what ICU care is available. This also aids the ICU team to identify the common pathologies presenting in O&G so that the best care can be delivered.

The role of sexual self concept, five factor personality in risky sex behavior
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Introduction and Objective: Prevention of risky sexual behavior is one of the important goals to improving the health of the community. Since the risky sexual behavior is influenced by positive and negative aspects of sexual self-concept and Five Factor personality, could it be claimed that these two factors are related to each other and if we identify one, the other one can be controlled? Conclusion of this paper is answer to this question. Material and Methods: Cross-sectional study was performed in Yas Marriage Counseling Center of Isfahan. Farsi version of Goldberg Big-Five-factor personality and Snell's Multidimensional sexual self-concept completed by 84 couples in dating. Internal consistency analyzed by Cronbach's alpha of the questionnaire. Relations between the two questionnaires' aspects and were analyzed by Pearson. Results: Mean age of women was 23/1 and for men 26/8 years. Cronbach’s alpha coefficient of Goldberg questionnaire was .65 To .86 and for MSSCQ was .68 To .87. Positive relationship was between sexual esteem and openness to experience (r = .46, p < .0001) and negative relationship was between sexual depression and emotional stability (r = -.33, p < .0001). Other aspects of five factor personality and MSSCQ were not significant relationship with each other. Conclusion: By Looking at the results, this Big five factor personality as a fixed and permanent of behavior patterns can be regarded as the underlying cause of the sexual self-concept. Then, for reinforcement positive SSC and reduction of negative SSC and consequent control of risky sexual behavior must be followed by other factors.

FC30.01
The anti-apoptotic effect of Galectin-3 (Gal-3) in endometrial cells under the regulation of estrogen and progesterone
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Galectin-3 (Gal-3), a ubiquitously expressed gene involved in many cellular processes, has been recently recognized as factor related to endometrial receptivity. However, the precise biological function of Gal-3 in the endometrium and its regulation is still unclear. In this study, we detected the anti-apoptosis role of Gal-3 in endometrial cells and the expression of Gal-3 regulated by estrogen and progesterone. We found that expression of Gal-3 increased when exposed to apoptosis inducer, staurosporine. Gal-3 silenced endometrial cells were more sensitive to apoptosis inducer. Estradiol (E2) and progesterone (P4) up-regulated Gal-3 expression, which in turn decreased the apoptosis rate of endometrial cells. Our results strongly suggested that hormonal activation of Gal-3 by E2 and P4 is involved in inhibiting endometrial cell apoptosis, playing key roles in embryo implantation.

Key words: galectin-3, estrogen, progesterone, apoptosis, endometrium.

FC30.02
Low grade cervical lesion: PAP-HPV-test versus colposcopy-istology. Follow-up to 5 years
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Aims: To identify the appropriate management for patients with cytological diagnosis of L-SIL by determining the diagnostic accuracy of HPV-DNA testing compared with colposcopy in five-years follow-up. Methods: Observational clinical study of patients with a first diagnosis of L-SIL cervical-vaginal cytology. The sample was divided into two groups depending on the execution of a cytological follow-up at 6 month (group-A) or a colposcopy at diagnosis (group-B). All patients had an HPV test performed at diagnosis and were followed with Pap and HPV test for 5-years. The diagnostic accuracy to 60-months of HPV-DNA test and colposcopy was assessed by sensitivity, specificity, negative predictive value, positive predictive value, and calculating the likelihood ratio positive or negative. Results: In group A, the number of patients who developed high-grade cervical lesions was 48. In group B, was 35 (30 already identified at diagnosis). The sensitivity of HPV testing at 5-years was 93.7%, the NPV of 92.5%. The specificity of
31%, the PPV of 35.4% positive. Instead, the colposcopy, presented a sensitivity of 85.5%, specificity of 100%, PPV of 100% and a NPV of 96.2%. In group A the positive likelihood ratio was 1.36, the negative was 0.19. In group B, the positive likelihood ratio tending to infinity, the negative is 0.14. Conclusions: In patients with cytological diagnosis of L-SIL, HPV- DNA test may help to identify the best triage. The high sensitivity of HPV-test and its high NPV allows, to exclude from the colposcopic examination the patients with L-SIL cytology and negative HPV test.
Colonic endometriosis with appendiceal and lymph node involvement mimicking colon cancer
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Introduction: Although endometriosis with sigmoid serosal involvement is not uncommon in women of childbearing age, the lymph node and mucosal involvement is rare. Moreover, the differential diagnosis of colonic endometriosis from other diseases of the colon is rather difficult due to the lack of pathognomonic symptoms and the poor diagnostic yield of colonoscopy and colonic biopsies. Case presentation: We present a case of a 42-year-old woman, which presented with hematochezia as the only complaint. The initial diagnostic workup suggested colon cancer. Histological evidence, obtained from colonoscopy, along with pelvic MRI and endoscopic ultrasound didn’t let to any conclusive diagnosis. The final diagnosis of intestinal endometriosis was confirmed after surgery, which showed also posterior uterine and appendiceal involvement. Final histology demonstrated also lymph node involvement. Conclusion: Colonic endometriosis is often a diagnostic challenge and should be considered in young women with symptoms from the lower gastrointestinal tract. Lymphatic infiltration of epicolic lymph nodes raises questions about the benign nature of this presumed innocent disease.

Vaginal microbiome before and after intercourse by Illumina sequencing
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Balance of vaginal microbiota is tightly associated with reproductive function while its imbalance may lead to infertility. During sexual intercourse, the fluctuations in vaginal ecosystem are very likely. At the same time, according to our best knowledge there are no studies comparing vaginal microbiota status just before and shortly after intercourse applying next-generation sequencing methods. Objective. To assess the effect of the sexual intercourse on vaginal microbiota in female partners of infertile couples. Material and Methods. 15 infertile couples were studied. Two self-collected vaginal samples were taken on the 6th to 8th days of the menstrual cycle – before and 8-12 h after intercourse. Nugent scoring of Gram stained slides was used to evaluate proportions of different microbial morphotypes and to detect bacterial vaginosis. Vaginal microbiome was profiled using Illumina sequencing of the V6 region of 16S rRNA gene. Results. According to Nugent scoring, bacterial vaginosis was found in one woman, intermediate microbiota in 3 and normal microbiota in 8 women in both samples. In 3 women, normal microbiota turned intermediate after intercourse. The microbiome abundance profiles changed substantially in 5 out of 15 women after intercourse. Mean Nugents scores were higher in these 5 women before intercourse (3.4 vs 1.2), after intercourse (4.0 vs 2.1) as well as totally (3.7 vs 1.6, p=0.025) in comparison with the rest of 10 women. Conclusions. Sexual intercourse may cause significant shifts in vaginal microbiota that is less expressed in the presence of lactobacilli-dominant vaginal microbiota. These changes may interfere with fertilization.

Relationship between fasting serum glucose, age, body mass index, serum levels of 25-OH vitamin D and parathyroid hormone and the risk of osteoporosis in healthy postmenopausal Turkish women
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Objective: We purposed to clarify the relationship between bone mineral density (BMD) and fasting glucose levels (FG), age, body mass index (BMI), serum levels of 25-OH vitamin D and parathyroid
hormone (PTH) in postmenopausal women. Methods: Serum concentrations of 25-OH vitamin D, PTH and FG were measured in 644 women between ages 45-78 years. Measurements were compared with BMD of total femur (TF), femoral neck (FN) and lumbar spine (L1-L4). Chi-square tests, Student t test and logistic regression analysis were used. Results: We found that, in women after the age of 60, serum levels of vitamin D were significantly lower than in those of before this age. We observed that low 25-OH vitamin D and low BMI were significantly associated with osteoporosis according to BMD measurements of TF, FN and L1-L4 before and after the age of 60. Low serum levels of PTH were significantly associated with osteoporosis in BMD measurements of TF and L1-L4 only after the age of 60. We found no correlation between FG and body mass index (BMI). Conclusion: Vitamin D is essential for the prevention of osteoporosis. Our results were compatible with the fact that low serum level of 25-OH vitamin D and low BMI are risk factors for osteoporosis. We also confirmed that low PTH is another important risk factor for osteoporosis in only cases after the age of 60. However more studies are needed to determine the relationship between glucose intolerance and osteoporosis.

FC30.06
Vilnius students' knowledge about HPV and their sexual behavior
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Objective: to evaluate knowledge about HPV and sexual behavior of students studying in Vilnius. Methods: Questionnaire survey carried out in Vilnius city universities from October 2008 till February 2009. Original questionnaire cover social, demographic characteristics, knowledge about HPV , their sexual intercourse and the number of sexual partners. Results: The survey involved 401 (20.6%) men and 1547 (79.4%) women. The average age of participants was 21.12 ± 3.56y. When asked about the sex life, responded 1596 (81.9%) students, including students having sex (I group) was 1297 (66.6%), their sexual intercourse average age was 17.8 ± 1.73y. The average number of sexual partners - 2.38 ± 2.4. 299 (15.3%) no sex intercourse (II group). 885 (68.2%) I-st gr. and 191 (63.9%) of II-nd gr. had heard about HPV (p>0.05). 580 (44.7%) I-st gr. and 57 (19.1%) II-nd gr. were smokers, average age of sexual intercourse among them was 17.5 ± 1.6 years, while non-smokers - 18.3 ± 1.8 years (p = 0.000). Reliable correlation between sexual partners and students' sex life intercourse was obtained (R = 0.33, p = 0.000). Conclusions: Both groups of students, having sex or not, had heard about HPV similarly, but knowledge about the vaccine against HPV was significantly different - the first group was better. Significantly more smokers students were having early sexual life intercourse than non-smokers. Bad habits determined to early sexual relationships. The earlier students engaged in sexual life, the higher number of sexual partners was

FC30.07
Serum element contents and mammographic density in healthy postmenopausal Turkish women
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Objectives: The purpose of this study is to evaluate the relationship between serum contents of macro-elements and trace elements and mammographic density and another breast cancer risk factors in postmenopausal women. Methods: Serum contents of iron, copper, zinc, sodium, potassium, magnesium, calcium, ionized calcium, inorganic phosphorus were determined using atomic absorption spectrometry in postmenopausal healthy Turkish women in our study. Serum contents of these elements were compared with mammographic density of 644 postmenopausal women between ages 49-76. Mammographic density was measured by using computer assisted analysis of mammograms. Also mammographic results were classified according to Breast Imaging Reporting and Data System (BIRADS) into five groups. Also age, menopausal period, body mass index (BMI), smoking, gravidity and parity were compared with mammographic density. For statistical analysis, Chi-square tests and Student t test were used. Results: Only high serum level of ionized calcium level was significantly associated with increased mammographic density. We found no
relationship between serum levels of iron, copper, zinc, sodium, potassium, magnesium, calcium, inorganic phosphorus and mammographic density in addition to groups of BIRADS. Also, we did not find any relationship between age, menopausal period, BMI, smoking, gravidity, parity and mammographic density. Conclusion: High serum levels of ionized calcium was significantly associated with increased mammographic density. This effect may be explained with Ca-related increased calcifications which are often important and common findings on a mammogram. Mammographic calcifications can be associated with a benign or malignant process. For this reason, further analyses are needed.

**FC30.08**
**Evaluation of personality of patients with dysmenorrhea with the help of the Millon’s Clinical Multiaxial Inventory III**
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For systematic evaluation of patients with dysmenorrhea, we studied 120 consecutive patients with the Millon’s Clinical Multiaxial inventory MSMI-III. Half of the patients reported dysmenorrhea of some concern while the other half of no or minor concern. The former group used routinely drugs for dysmenorrhea in a PRN basis and some used medications as prophylaxis. The former group was free to use psychoactive medication but people using psychoactive medications were excluded from the latter group. Dysmenorrhea was not graded according to severity and stress was laid on personal view about the matter. Both groups had good compliance for accomplishing the tests. The two groups were completely different in regard to many scales of both tests. Axis I disorders (personality) could not be attributed to chronic pain and because of this only axis I disorders were regarded for correlation. Patients with dysmenorrhea had higher scores in passive aggressive, borderline, avoidant, dependent, histrionic and obsessive personality scales (p<0.04). On the other hand patients without dysmenorrhea showed higher scores in narcissistic, schizoid, schizotypal, paranoid personality scales (p<0.07). Most patients with dysmenorrhea showed a lower pain threshold, increased preoccupation about disease and higher rates of menstrual irregularity. These patients are more regularly visited by their gynecologist, ask more questions about cancer risk and are more prone to early adjustment with depressed and anxious mood. We conclude that although the pathophysiological basis of dysmenorrhea can purely be attributed to organic and molecular landmarks the expression of pain and reaction to it is personality dependent.

**FC30.09**
**The effects of hydro-alcoholic extract of Ceratonia siliqua L. seeds on LH, FSH and testosterone in rat**
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Objectives : In traditional medicine, Carob tree seeds have been used as anti diarrhoeal remedy and to treat digestion diseases. In this research, the possible effects of Carob seeds extract on levels of luteinizing hormone (LH), follicle-stimulating hormone (FSH), testosterone and dihydrotestosterone (DHT) hormones and testicular tissue as well as improving fertility in male rats were investigated. Materials and methods: Fifty adult male rats were divided into five groups of tens as follow: The control group was left on treated, the sham group received only distilled water and experimental groups were treated to Carob tree seeds extract (150, 300, 600 mg/kg; CTSE) for 31 days. Blood samples were taken to measure LH, FSH, testosterone and DHT concentrations and testicular histological changes were investigated. Results : consumption of CTSE caused to significant increasing of testosterone and DHT levels while the level of LH declined in experimental groups receiving 150 and 300 (mg/kg) extract and the FSH concentrations did not show any significant changes. Furthermore, sperm density in seminiferous tubules was increased in response to medium and high dosages of the extract. Conclusions : The CTSE may have some effects on the synthesis of cAMP and the activities of enzymes involved in steroidogenesis in Leydig cells thereby leading to an increase in serum concentration of testosterone.

Key words: Ceratonia siliqua, LH, FSH, Testosterone, Dihydrotestosterone, Rat.
Case report: Acardiac twin pregnancy with successful term delivery

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Acardiac twinning, known as the twin reversed arterial perfusion (TRAP) sequence is a rare anomaly occurring ~1% of monozygotic twins (1). In the TRAP sequence, the co-twin donates blood to the acardiac twin through its umbilical arteries via vascular anastomoses in the placenta. The complications of donor twin are frequent and include heart failure, preterm labor and death in 55% cases (2). A 30-year-old G2P1 lady completed the first and second trimester ultrasound scan (12 gestational weeks-GW and 19 GW) with one normal appearing fetus. The routine antenatal care visit schema was followed. In 32 GW the patient got amoxicillin due to bronchitis and additional ultrasound scan was referred in 34 GW. The fetus was at frank breech position with light abdominal circumference retardation, normal umbilical doppler flow and amniotic fluid index. The anomalous mass demonstrating heterogeneous echotexture was found in lower segment of uterus. MRI scan confirmed the hypothetical finding of the acardiac twin. Elective cesarean section was performed in 40GW, a girl baby, 3370g, was born with Apgar score 8-10. A solid unrecognizable amorphous mass of 7x8 cm was extracted in the separate amniotic sac. The mass had thin umbilical cord with two vessels and contained dermal and musculo-skeletal tissues, immature fat and brain tissue. In our case, the successful term pregnancy with co-existing acardiac amorphous twin was possible due to poorly developed vascular anastomoses in placenta and extremely thin umbilical cord of the monster.


Myometrial thickness of scarred uterus after repeated Caesarean section

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Introduction: Uterine rupture may be related to factors affecting the process of myometrial scar formation, which becomes more vulnerable during labour. Biochemical and mechanical processes may, therefore, both contribute to the process of rupture of some scars. The aim of this study is to demonstrate that the thickness of the lower uterine segment, both sonographically measured and after elective caesarean, is lower in patients at risk for uterus rupture. Materials and methods: 63 term obstetric patients candidate for repeated caesarean. They underwent transvaginal scan examination with measurement of the lower segment thickness the day before repeated caesarean. After delivery of the fetus and placenta and administration of institutional standard uterotonic medication, the thickness of the lower uterine segment was measured by Castroviejo’s caliper in three different points on both upper and lower incision. Statistics was performed by 16.0 SPSS and 2.0 KyPlot. Results: General thickness of lower uterine segment (average of upper and lower measurements) is less in patients with two or more repeated caesareans (p=0.006). Both upper and lower breaches of incision are less thick in patients with two or more repeated caesareans (p=0.005 and p=0.038). Sonographically measured scar thickness is lower in patients with two or more repeated caesareans (p=0.045) but higher in patients who underwent the last caesarean more than two years before. Conclusions: The contractile ability of the uterine scar, deducible from the measured thicknesses, is less in patients most at risk of uterus rupture and may play a role in the pathogenesis of uterus rupture.

Evaluation of the diagnostic accuracy of the pelvimetric threshold values

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Objective: To correlate pelvic dimensions and birth weight to the mode of delivery and to test the diagnostic accuracy of pelvimetry. Methods: An observational cohort study on pregnant women at an increased risk of
fetal-pelvic disproportion during 2000-2008 in North-Carelian Central Hospital. After pelvimetry, pelvic adequacy was clinically tested in a trial of labor, with successful vaginal delivery being the target condition and the reference standard. Newborns were categorized into two birth weight groups (< 3700 and >3700g) and the distributions of pelvic measurements were compared in vaginal and Cesarean deliveries. ROC curves were established in both birth weight groups and the slope connecting the optimal points of ROC curves was used as a cut-off line. Results: The Cesarean section rate due to protracted labour above the cut-off line was 23% and 3.7% below the cut-off line, the RR above the threshold thus being 7.4 (95% CI: 3.75 – 19.4) for dystocia. Correspondingly, the positive predictive value (PPV) was 0.23 (95% CI: 0.16 – 0.31) and the negative predictive value (NPV) was 0.88 (95% CI: 0.85 – 0.92) for Cesarean delivery. Discussion: A cut-off line based on both birth weight and inlet circumference would be a more versatile tool than preselected threshold values in the interpretation of the pelvic dimensions. However, an optimal algorithm for the assessment pelvimetric data in conjunction with fetal measurements should be sought for in larger studies.

FC31.04
Labor induction with prostaglandin gels in Riga Maternity Hospital
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Objectives: Induction of labor is an increasingly common practice that accounted for 14% in 2010. The purpose of this study was to investigate the most popular indications for labor induction, outcomes of birth process and complications and to compare the efficacy and safety of both ways of using prostaglandin (PG) gel – cervical (CG) and vaginal (VG). Materials and Methods: A retrospective study of 622 labors induced with prostaglandin gels that were performed in Riga Maternity Hospital in year 2010. Collected data were analyzed using SPSS Statistics 17.0 program. Results: PG C inserts were performed in 69.4%, V 30.6%. Most popular indications for CG were prolonged pregnancy 39.3% and prolonged preliminary period 14.6%, for VG PPROM 77.4%. Uterine hyperstimulation appears using VG 2%, CG 1%. Mean time to induce labor with CG is 3h36min, with VG 1h48min. More then 1 dose needed for induction with CG in 24%, VG 23%. Oxytocin augmentation is needed after VG application in 44%, CG 39%. Vacuumextraction is performed after CG in 3%, VG 1%. Caesarean probability for C inserts 20%, V 28%. Increased blood loss and postpartum complications more often seen in induced labors (C=V). Fetal distress complicates 27% of deliveries after CG inserts, 18% after VG. Conclusions: Usage of prostaglandins is associated with higher risk of postpartum complications. Cervical gel inserts increase mean time of induction and risk of fetal distress. For more results and better conclusions prospective study should be performed.

FC31.05
Current features and management of the early stages of pregnancy in women with antenatal fetal death in anamnesis
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Pregnant women with antenatal fetal death (AFD) in the history are the group of extremely high perinatal risk. Early stages of the pregnancy in these patients are often complicated by the development of the miscarriage, retrochorial hematoma and the intrauterine embriolar growth retardation. The purpose of the study - the investigation of features of early pregnancy in women with a history of AFD, after the comprehensive preparation for next pregnancy. We observed 16 pregnant women aged 18 to 36 years (mean 29.5 years) during 2010 - 2011 with AFD in a previous pregnancy. Anamnesis: in 13 (81.25%) pregnant AFD has occurred during the first pregnancy, two (12.5%) – during the second pregnancy, 1 woman had (6.25%) - 2 cases in history. AFD has occurred in terms of 20-28 weeks in 6 (7.2%) cases, in 29-36 weeks - in 5 (29.4%), in weeks 37-39 - 6 (35.3%). All women with the comprehensive management and the predgavridary prevention were assigned to folic acid and B vitamins (Angiovit), antioxidants (Omega 3), gestagens in phase II of the menstrual cycle (utrozhestan, dufaston), the reception of which lasted if pregnancy occurs. Correction of the hemostatic system in the appointment of antiplatelet agents was carried
out (Kardiomagnil) and low molecular weight heparin as recommended by the haematologist. In terms of 10-12 weeks the therapy for the prevention of primary placental insufficiency included Actovegin. All pregnant women with carriage of genetic polymorphisms in the blood coagulation were threatened by low molecular weight heparin under the control.

**FC31.06**  
**Attitude of healthcare workers towards delayed cord clamping in a district general hospital**  
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Objective: To ascertain the views of health care workers surrounding Delayed Cord Clamping (DCC). Methodology: This is a questionnaire-based study. The participants were Consultant Obstetricians, trainees in O&G, nurses and midwives from Darlington Memorial Hospital. The data from the questionnaires were collated and analysed. Results: Seventy-three completed questionnaires were returned. The majority of the respondents (95%) were aware of the benefits of DCC. However documentation of timing of DCC was not universally practised in spite of the RCOG recommendation to do so. The study showed that the majority of the participants was in favour of DCC and would recommend it to their patients. The pioneering work on DCC done by Hutchon et al in Darlington Memorial Hospital may have contributed to this. Conclusion: The majority of the respondents was in favour of and practise DCC. In spite of an RCOG recommendation to document timing of cord clamping, documentation of the timing of DCC was not universally practised in our study. Although, the knowledge of the benefits of DCC was demonstrated, there is still need to educate health care workers that the very premature babies are the ones that benefit from DCC most.

**FC31.07**  
**The effectiveness of the obstetric emergency team**  
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In November 2009 Leighton Hospital introduced an obstetric emergency team (OET) to streamline the communicative process surrounding any emergency caesarean section. It was hoped it would deliver better organisation and dynamism in this time critical situation out-of-hours. The aim of this retrospective audit was to quantify decision-delivery times (DDT) for Category 1 caesarean sections (Cat1 CS) and to look at the anaesthetic impact of the OET, particularly the rate of general anaesthesia (GA). The standard of the audit was that all Cat1 CS should have been delivered within 30 minutes of the decision being made. Data was collected over a one year period starting 1st February 2010 and complied in the SIGMA electronic database. 67 Cat1 CS occurred during data collection. Of these, 35 triggered an OET call. There were two inappropriate calls. The DDT was <30 minutes in 100% of cases triggering the OET, although overall compliance amongst all Cat1 CS was 94.0%. No DDT was >3 minutes, and anaesthetic technique was mixed in the non-compliant group (2 GA, 2 regional). Overall GA rate was 61.2% (41/67) across all Cat1 CS. Amongst those activating the OET call the GA rate was 60.6% (20/33). The GA rate for all caesarean sections was 14.1% (94/666). Overall GA cesarian section rate also fell significantly in this period. The audit showed that OET reliably achieves DDT of <30 minutes. DDT was equivalent between Category 1 caesarian sections responded to by the OET and those by resident teams, suggesting an effective service.

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**FC31.08**  
**Outcomes of HIV in pregnancy: a 10 year KKH review**  
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The aim is to compare the difference in vertical transmission rate between women with very low viral count i.e. < 50 copies/ml who underwent caeserean section and normal vaginal deliveries. Also with proper intrapartum and postpartum advice and care, we look at the outcome of unbooked pregnancies. A retrospective review of HIV positive women who delivered in KK Hospital of Singapore from Jan 1997 to June 2007 was conducted. All case notes were reviewed and data were collected and analysed using
Microsoft Excel spreadsheet. All except unbooked pregnant women were started on antenatal anti-retroviral therapy. A zidovudine infusion was given intrapartum. All neonates were prescribed zidovudine syrup from birth for 6 weeks. Avoidance of breastfeeding was advised for all women. A total of 75 deliveries by 67 women were identified. 4 neonates were tested HIV positive, amounting to a vertical transmission rate of 5.3%. Of 12 women that were found to have viral counts less than 50 copies/ml before their deliveries, 4 underwent normal vaginal deliveries while 8 underwent caesarean sections. All babies were tested HIV negative. Among the 5 unbooked pregnancies and 2 pregnancies that were booked at term, 1 neonate was found to be positive (14.3%). There is no difference in perinatal transmission in women with very low viral count i.e. less than 50 copies/ml who underwent caesarean section or normal vaginal deliveries. For those women with unbooked pregnancies, proper intrapartum care, neonatal anti-retroviral therapy together with avoidance of breastfeeding reduces vertical transmission rate and improves neonatal outcome.

**FC32.01**

**Gestational trophoblastic disease in the east area of Madrid**


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Objective: Our objective was to study the characteristics and outcome of women diagnosed of Gestational Trophoblastic Disease (GTD) and the need for adjuvant medical treatment in the population of Area 3 Madrid (Spain) from 1998 until 2010. Materials and Methods: We have performed an analytical descriptive study, consisting of 42 women, diagnosed with GTD in the Department of Obstetrics and Gynecology, University Hospital Príncipe de Asturias. The data were obtained after reviewing medical records and were analyzed statistically using SPSS 15.0 program. Results: The mean age was 30 years. More than half of women was multiparous (57.1%). The mean gestational age at diagnosis was 11 weeks. The mean of beta-hCG was very high, 301.863,73 mU/mL. In 97.6 of women curettage was performed, and only one case needed hysterectomy with double oophorectomy with the suspected diagnosis of uterine sarcoma, but ultimately became the only case of invasive mole. The diagnosis with ultrasound is insensitive, since we only diagnosed 42.9% of women. 48.8% of women had a subsequent pregnancy. The pathologic diagnosis found that 76.2% were partial hydatidiform moles, 21.4% complete hydatidiform moles and only one case was an invasive mole. Chemoterapy was needed in 4.7% of patients. Conclusions: Hydatidiform mole is an unusual disease in our area, more frequent partial type and with a favorable prognosis, as indicated by our results.

**FC32.02**

**Laparoscopic versus open radical hysterectomy in elderly patients with early-stage cervical cancer**

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Background: To compare the surgical and survival outcomes between laparoscopic radical hysterectomy (LRH) and open radical hysterectomy (ORH) in elderly patients with early-stage cervical cancer. Methods: A retrospective analysis was performed on elderly patients (≥ 70 years) who underwent LRH (n=41) and ORH (n=92) due to stage IA2-IIA2 cervical cancer. Results: One patient (2.4%) in LRH group required conversion to laparotomy. Operating time, perioperative hemoglobin level change, transfusion, and recovery of bowel movement were not different, however, estimated blood loss (375 mL vs. 553 mL, P=0.014) and postoperative hospital stay (9.8 days vs. 20 days, P<0.001) were significantly shorter in LRH group. Intraoperative complication (LRH vs. ORH, 4.9% vs. 3.3%, P=0.651), postoperative complication (9.8% vs. 14.1%, P=0.485), and bladder dysfunction (26.8% vs. 207%, P=0.431) were not different between groups. No one required re-operation due to postoperative complication. There was no postoperative mortality. After the median follow-up time of 44 months, the 5-year disease-free survival was 100% for LRH group and 94% for ORH group (P = 0.192), and 5-year overall survival was 100% and 97%, respectively (P=0.297). Conclusions: Elderly patients tolerated well both LRH and ORH. LRH is a reasonable or even more favorable alternative to ORH for elderly patients.
Objective: To study the prognostic factors of malignant ovarian tumors and to determine the prognostic impact of hormonal receptors proteins p53, progesterone receptors and Bcl-2. Methods: Retrospective study conducted at the university hospital of Sfax, Tunisia from 1997 to 2008 including 57 patients with malignant epithelial ovarian tumor. Results: The mean age of our patients was 54 ± 5 years. 64.91% of tumors were diagnosed at an advanced stage III or IV according to the FIGO1988 classification. 96.49% had an initial surgery which was complete or optimal in 52.73% of cases, suboptimal in 21.82% and limited to a minimum excision in 25.45%. Advanced FIGO stage (p = 0.0135), presence of ascites (p = 0.0165), the positive peritoneal cytology (p = 0.0004) and a suboptimal residual tumor (p = 0.0006) were significantly correlated with a lower overall survival. The nuclear expression of p53 was correlated with factors of a poor prognosis and a high histological grade in multivariate analysis (p = 0.04). In contrast, the expression of Bcl-2 was significantly associated with better survival (p = 0.02). The progesterone receptors (PR) were more frequently expressed in early FIGO stages (p = 0.045), tumors of low grade (p <0.0001) and those with non-serous histology (p = 0.01). No correlation was found with the estrogen receptors (ER). Conclusion: In our series, nuclear expression of p53 was correlated to worse prognosis while the progesterone receptors and the expression of Bcl-2 were rather associated with a better survival.

Introduction: The sentinel lymph node (SLN) biopsy is useful in the evaluation of lymph node status in early stage vulvar cancer, potentially reducing inguinofemoral lymphadenectomy associated morbidity. Objectives: The aim of this study was to determine the SLN detection rate, compare the intraoperative histopathological analysis of SLN with the final result and define the groin recurrence rate in the cases that the SNL shows no metastatic involvement. Materials and methods: An observational, retrospective and descriptive study including patients with squamous cell cancer of the vulva where the SLN procedure was part of the therapeutic approach, since January 2000 to November 2011 (based on consultation of medical records). Results: 28 women with squamous cell cancer of the vulva underwent a SLN procedure. The sentinel node was identified and removed in 27 cases (27/28) with a SLN detection rate of 96.43%. The intraoperative histopathological exam reveal no cancer cells in 85,19% of the cases (23/27) and a complete nodal dissection was performed in four cases (14,81%). The final result of SLN histopathological exam confirmed the intraoperative analysis in 96,30% of the cases (26/27) and a second surgery had to be done in one case. The groin recurrence rate in women with a negative SLN biopsy was 0% (median follow-up was 35 months). Conclusions: The SLN procedure is promising as an alternative to inguinofemoral lymphadenectomy, but to achieve positive results is required technical skills, experience and a high quality control of a multidisciplinary team.

Objective: Interleukin-10 (IL-10) is an immnosuppressive cytokine produced by not only ovarian cancer cells but also by immune cells such as T- and B- lymphocytes, monocytes and macrophages. The aim of study was to compare the percentage of peripheral blood (PB) CD4+ and CD8+ T cell producing IL-10 in ovarian cancer patients (OVC) (n=32) or benign ovarian tumors (n=24). Materials and Methods: PB
mononuclear cells from cancer patients or control subjects were stimulated for 4 hours ex vivo with ionomycin and phorbol myristate acetate (PMA). The percentage of CD4+ and CD8+ T cells producing IL-10 was measured using flow cytometry. Results: The percentage of CD4+ T cells producing IL-10 was higher in patients with OVC 0.24% (0.13-0.35%) in comparison with benign tumor patients 0.20% (0.14-0.26%), but this difference did not reach statistical significance. The percentage of IL-10+CD8+ T cells was higher in ovarian cancer patients 0.08% (0.05-0.13%) compared with control subjects 0.06% (0.04-0.09%), however the difference was not significant. There was no difference in the percentage of IL-10+CD4+ and IL-10+CD8+ T cells between patients with grade II and III of OVC and among patients with serous and endometroid carcinoma. Conclusions: We demonstrated the presence of IL10+ cells in both CD4+ and CD8+ T lymphocytes in ovarian cancer patients or benign tumor. There was no difference in the percentage of IL10+ and IL10+CD8+ T cells in both study groups, which prove that these cells are probably not useful in differentiating malignant and nonmalignant tumors.

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**FC32.06**

**Radical abdominal trachelectomy – safe method for early cervical cancer treatment**

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**Introduction:** Radical trachelectomy was reported by Dargent in 1994 as a modification of the radical hysterectomy while maintaining the proximal cervix. In 1998, Roy and Plante developed the following criteria for radical trachelectomy: a desire to preserve fertility, no clinical evidence of impaired fertility, stage IA2 - IB cervical cancer, lesion size <2.0 cm, limited endocervical involvement at colposcopic evaluation, no evidence of pelvic node metastases Fertility outcomes have shown 29 - 72% pregnancies after trachelectomy. Methods: We have performed radical trachelectomy at Tartu University Hospital Haematology and Oncology Clinic since 2007. Results: From June 2007 until January 2012, 10 women have undergone radical abdominal trachelectomy at our clinic. Patients were selected according to Roy and Plante criteria. All patients were in stages IA1 and IB1, 7 cancers located cervical wall and 3 located in the endocervical canal, median operation time was 139 min (79-249), median blood loss was 275 Ml (0-800), median lymph node harvest was 8,3(3-19), median hospital stay was 6,4 days(4-8). No mortality and morbidity. One patient had recurrence on vaginal wall - the patient belonged to high risk group because of lymphovascular invasion and VAIN3. Conclusion: Radical trachelectomy is a viable option for preserving fertility in selected cases of early cervical cancer. As more physicians become at ease with this procedure, and more women become aware of this opportunity, the number of cases will continue to grow. Radical abdominal trachelectomy is safe method for treatment of early cervical cancer.

**FC32.07**

**Assessment of the performance of the dynamic spectral imaging system (DYSIS) in three different concentrations of acetic acid solution**

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**Introduction:** We investigated the effect of three acetic-acid concentration solutions on cervical acetowhiteness and assessed the corresponding clinical performance of DySIS in identifying high-grade disease. Methods: DySIS enables quantifying and mapping the degree and duration of acetowhiteness during a three-minute measuring period. We investigated the effect of three different acetic-acid concentrations in its diagnostic performance. We enrolled 57 women with abnormal cytology; three were excluded due to protocol violations, resulting in 54 cases eligible for analysis. Each underwent colposcopy with DySIS in three successive examinations (with at least 45 minutes intervals), using 3%, 4% and 5% acetic-acid, totaling 162 colposcopic examinations. Biopsy samples were collected from areas corresponding to the most atypical indications of the DySISmap. All biopsies or subsequent loop excisions were submitted for histological “golden standard” assessment. Results: The performance of the DySIS mapping in identifying,
in-vivo, high-grade cervical neoplasia was: a) sensitivity for 3%:86%; 4%:79%; 5%:82% and b) specificity for 3%:81%; 4%:77%; and 5%:77%. DySIS demonstrates high performance in all concentrations, while 3% shows the highest (sensitivity-86%, specificity-81%). We observed that morphological characteristics were better visualized when using the 5% acetic-acid. Conclusion: We quantified the effect of the acetic-acid concentration in the acetowhiteness and assessed its effect on the performance of DySIS mapping. DySIS demonstrated reproducibility, indicating that it can be operated with different concentrations with similar, and high, performance. The fact that DySIS exceeded the typical colposcopic sensitivity suggests that it can assist the improvement of colposcopic performance in detecting and grading, cervical neoplasia in-vivo.

**FC33.01**  
**Dysmorphic newborn with unknown epilepsy syndrome or congenital valproate syndrome: case report**  
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Objectives: to present an unusual case of dysmorphic newborn born from a mother with epilepsy treated with Valproate. Material and Method: repeated clinical examinations of the newborn were performed. A head ultrasound, a heart ultrasound and an abdominal ultrasound were performed too. In order to exclude any chromosomal abnormality, a karyotype has been made. Results: The case of a term newborn is presented. The mother was known with epilepsy, grand mal, the first episode as a teenager. She is presently in treatment with Valproate. The neonate presented with a particular facies, proeminent forehead, hypertelorism, low set ears, palmar and plantar grif. The ultrasounds undertaken excluded a head, heart or internal organ malformation. The neurological exam revealed a neonate with axial and periferic hypotonia. The karyotype indicated a normal male, 46 xy. The facial and neurologic features are not consistent with congenital valproate syndrome. Conclusions: This could be a new case of a syndrome of facial dysmorphic features and neurologic deficit, occurring in a mother with neurological deficit (epilepsy), not associated with chromosomal abnormalities.

**FC33.02**  
**Stillbirths in the Tula region for 10 years. Analysis of the rate of stillbirths in the Tula region of Russia from 2000-2009**  
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Stillbirths increased by 5.5% (2000-5.2‰;2009-5.5‰). From 2000 to 2009 has seen an increase in antenatal fetal death in 6.4% (73.8‰- 2000; 80.2‰-2009). In parallel, recorded a decline intranatal loss of 6.4% (26.2‰- 2000; 19.8‰ -2009). Stillbirths in 2000 - 5.2 ‰, prenatally – 73.8%, intrapartum – 26.2%, including preterm, 45.9%; 2001– 4.1‰, 100% -of antenatal, intrapartum - 0, including preterm - 84%; 2002-6.7‰, prenatally – 81.9%, intrapartum -18.1%, including preterm - 62.7%; in 2003 - 5.2 ‰, prenatally – 91.3%, intrapartum -8.7%, including preterm – 55.1%; 2004 - 5.4 ‰, prenatally – 64.8%, intrapartum – 35.2%, including preterm-32.4%). Stillbirths in 2005 - 4.9‰, prenatally – 82.3% intrapartum-18.6%, including preterm - 43.5%; in 2006 - 4.6‰, prenatally – 81.4%, intrapartum - 42.4%, including preterm - 42.4%; in 2007 - 4.4‰, of antenatal -75.9%, intrapartum -24.1%, including preterm - 50%; in 2008-5.3‰, of antenatal-76%, intrapartum -24%, including preterm -45.3% ; in 2009 -5.5‰ ,prenatally – 80.2%, intrapartum -19.8%). Among premature stillborn in 2000-2008 amounted to 50.7%. Over 10 years in the Tula region has seen an increase in the stillbirth 5.2‰ in 2000 to 5.5‰ in 2009 in 1000 live births and the dead. The structure of stillbirth was an increase in antenatal fetal death from 73.8% in 2000 to 80.2% in 2009; parallel to the observed decrease intranatal losses from 26.2% in 2000 to 19.8% in 2009.
Spontaneous rupture of membranes is associated with adverse obstetric and neonatal outcomes in term singleton pregnancies

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Objectives: To compare obstetric and perinatal outcome in term deliveries with and without spontaneous rupture of membranes (ROM). Materials and Methods: This was a retrospective study of all deliveries in a single university obstetric unit during 2004-2008. Only spontaneous singleton deliveries after 37 completed weeks of gestation were included in the analysis. Cases were divided according to the state of fetal membranes at the time of admission (Group 1: with ROM and Group 2: without ROM). Maternal characteristics, mode of delivery and perinatal outcome parameters were reviewed and compared. Results: Overall, 5,362 deliveries were performed during the study period. 2,482 met the inclusion criteria, including 847 (34.1%) admitted with ROM and 1,635 (65.9%) admitted with intact membranes. Mean maternal age did not differ significantly, however, mean parity was higher in women without ROM (group 1, 1.71 ± 0.9 vs. group 2, 1.83 ± 0.9, p<0.001). Mean duration of labor was significantly lower in women without ROM (group 1, 5.6 ± 4.3 vs. group 2, 4.1 ± 3.5, p<0.001). Emergency caesarean section (CS) rate was higher in women with ROM (8.1% vs. 4.4%, p=0.001). Fetal distress was the most common indication for emergency CS and the rate was higher in women with ROM (6.3% vs. 2.9%, p=0.001). Finally, the rate of neonates with Apgar score ≤ 4 at the 1 minute was higher in the same group (p=0.003). Conclusions: This study showed that spontaneous rupture of membranes in term pregnancies is associated with higher emergency CS rate and worse perinatal outcome.

The incidence of B Group streptococcus among pregnant women in Latvia

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Introduction: Maternal colonisation with B group streptococcus (BGS) is recognized as the main risk factor in development of neonatal sepsis. 5 - 30% of pregnant women in European countries have rectovaginal colonization with BGS. If women is BGS positive, the risk for newborn infection is 30-70% and 0.5-1 of 1000 infected newborn develope early neonatal sepsis. It is approved that antibacterial prophylaxis during delivery decreases the risk 3-4 times. The approach of antibacterial prophylaxis depends on BGS incidence among women in pregnancy and delivery. The BGS incidence in Latvia is not estimated and current recommendations of antimicrobial prophylaxis is based on risk factors during delivery. Objective: Our aim is to estimate the incidence of BGS among pregnant women in Latvia to recommend appropriate approach of antimicrobial prophylaxis during delivery. Methods: In study were included 161 women after 35 weeks of pregnancy. 146 were examined the culture for BGS by swab from low vaginal part and rectum and 15 women were examined for BGS PCR with Gene Expert System BGS. Results: We found that 17% of women after 35 weeks of gestation are BGS positive. Conclusion: Our data supports that current approach of antimicrobial prophylaxis during delivery in Latvia has to be revised. All pregnant women has to be informed about BGS, explained the consequences and recommended to examine culture for BGS during pregnancy. Based on our data we have to implement in Latvia prenatal maternal screening for BGS and antimicrobial prophylaxis during delivery according to screening results.

Intrahepatic cholestasis of pregnancy – case report

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The intrahepatic cholestasis of pregnancy (ICP) has 1% prevalence in Portugal. This pathology is usually characterized by some itching, which starts to appear during the second and third trimesters. The itching is normally associated to an increase of bile acids and serum transaminases when in the absence of any other pathologies. The maternal prognosis is good with complete regression after delivery, and the pathology
recurrence in the following pregnancies is between 45 to 70%. However, ICP is related with an increase in fetal mortality. Oral administration of ursodeoxycholic acid (UDCA) is the preferred treatment, while the delivery should be scheduled to the 37th week. Women III Gest II Para with a history of ICP in the previous gestations and two preterm deliveries. Performed a cholecystectomy 18 years ago due to gallstones. Monitored until the 32nd week without complications, and by that time ICP symptoms start to appear. Admitted at 33w+2d for a case report, analytical/clinical maternal control, fetal surveillance, and treatment with UDCA, which has improved the symptoms. Clinically discharged at 34w+4d the patient was maintained under close observation by the CHAA Obstetrics service. At 37w+1d a transverse cesarean section was performed with the newborn weighting 3040g and Apgar 10/10. During the postpartum period it was observed a complete regression of the patient's clinical condition. With this work we intend to draw attention to the high recurrence of this pathology in subsequent pregnancies, and for the rise in fetal mortality. This leads to a tight surveillance in prepared medical centers.

**FC33.06**

**S100B protein concentrations in preterm infants: correlations with gestational age in term and preterm deliveries**

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S100B is acidic calcium-binding protein concentrated in nervous system, located mainly in glial cells. Hypotheses have been formulated, but its biological role is still debated. Its appearance in biological fluids was shown to be reliable index of brain distress. We investigated relationship between S100B concentrations in normal preterm and term infants. Methods: 119 neonates recruited, divided into control group (N=48) and overall risk group (N=71). Risk neonates were categorized into subgroups according clinical presentation. Blood sample was obtained from each patient at three time-points: 24h post-injury, 4th and 7th day after admission. S100B levels were measured using ECLIA (Electro-Chemi-Luminescence Immune Assay).

Results: We used SPSS 16.0 statistical program. ANOVA for repeated measures and statistical analysis of S100B measurements taken for preterm neonates. Friedman’s non-parametric test was used for statistical analysis of values acquired from serum S100B in term neonates with asphyxia. Discussion: We see two risk subgroups in term and preterm infants with average levels of S100B above the cut-off point at each measuring time-point. These levels increase along the following two measurements starting at 24h time-point after injury (AI), which is 3rd and 7th day after admission. Conclusion: S100B protein in term and preterm neonates is significantly higher the first 24h after birth. Thus S100B protein is good indicator of starting brain damage in term neonates, especially the first 24h after birth and is good indicator for early intervention. In preterm neonates it is also good indicator for starting or possible early brain damage.

**FC34.01**

**Plasminogen activator inhibitor -1 (PAI-1) and vascular endothelial growth factor (VEGF) as a risk factors for early prediction of gestational diabetes (GM)**

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Objective: The purpose of the current study was to investigate changes in maternal plasma PAI-1 and VEGF levels during gestation, search for possible relationships with major clinical risk factors of GD and make conclusions about the practical use of PAI-1 and VEGF in early diagnostics of GD will be made. Materials and Methods: 20 pregnant women and 10 healthy non-pregnant controls aged 20 to 42 were enrolled. Maternal venous blood samples were taken at 9-14, 16-18, 24 to 28 and 32-35 weeks of gestation. PAI-1 and VEGF levels were measured using enzyme immunoassay kits. Spearman rank correlation was used for statistical analysis. Results: No significant correlations were found with the risk factor of BMI, but PAI-1 levels correlated with the woman's age (p=0.1). The mean PAI-1 level was lower in the second and rose in the 3. and 4. measurements. Individual VEGF levels correlated between measurements in I and II trimester with tendency to be lower in 2. measurement (p<0.02). Conclusions: PAI-1 values are associated with
physiological insulin resistance in pregnant women. VEGF values are higher in beginning of pregnancy and falls gradually as a result of better tissue oxygenation. PAI-1 values are associated with a major clinical risk factor of GD - 8211; age, but are not associated with maternal BMI. VEGF values are not associated with major clinical risk factors of GM. Further research is needed to clarify whether PAI-1 and VEGF can be used as an independent risk factor.

**FC34.02**

**The medical management of Cushing’s syndrome during pregnancy**

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Objective: Cushing’s syndrome (CS) during pregnancy is a rare metabolic condition that is associated with high maternal and fetal morbidity. Clinical symptoms may mimic those of normal pregnancy. A diagnosis is best made based on clinical presentation, laboratory and imaging findings as well as a high index of suspicion. Medical management with anti steroidogenic agents has been shown to be effective however numerous reports have concluded that adrenalectomy remains the gold standard treatment. Its main limitation includes optimal timing of procedure in late first trimester or early second trimester to prevent spontaneous termination of pregnancy. Material and Method: This case involves our experience and management of a 38 year old patient with uncontrolled hypertension at 25 weeks gestation which was later diagnosed as ACTH independent CS on biochemical and imaging investigations. Result: Hypercortisolemia was successfully managed during pregnancy with metyrapone and the patient went into spontaneous labour at 35 weeks gestation to a healthy male neonate. An elective adrenalectomy was performed post partum and confirmed an adrenal adenoma. She remained well on follow-up. A review on the reported published literature showed that no more than 30 patients had been medically managed during pregnancy with the majority being successful in suppressing cortisol levels. Conclusion: Medical management of CS during pregnancy is a viable option with favourable maternal and fetal outcome. The medication was well tolerated. We recommend strict observation as hypertension may worsen and result in pre-eclampsia, as well as close fetal monitoring with serial ultrasound growth scans and regular cardiotocography.

**FC34.03**

**Prevalence of gestational diabetes by the WHO and the IADPSG criteria in Szekszard, Hungary**

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Aim: to compare the prevalence of gestational diabetes mellitus (GDM) defined by the World Health Organization (WHO) criteria used in Hungary with the modified diagnostic criteria recommended by the International Association if Diabetes and Pregnancy Study Groups (IADPSG). Materials and Methods: All pregnant women in the catchment area of Tolna County Balassa Janos Hospital had a 75 g OGTT (oral glucose tolerance test) to screen for GDM during 24-28 weeks of pregnancy according to the WHO criteria between 01/01/2007 and 28/02/2010. During the study period 3423 deliveries were registered in the hospital database. Of these women a total of 3180 (92.91 %) had OGTT result available and registered in our hospital. GDM was diagnosed by the WHO criteria if fasting plasma glucose (FPG) >7.0 mmol/l or 2h PG >7.8 mmol/l, and by the IADPSG criteria if FPG >5.1 mmol/l or 2-hPG >8.5 mmol/l (no 1h PG glucose was measured during the study period). Results: The overall GDM prevalence rate was 6.4% by the WHO and 11.0% by the modified IADPSG criteria. Age, prepregnancy BMI were significantly higher in GDM diagnosed by either criteria, while weight gain during pregnancy was smaller among GDM compared to healthy pregnant women. Conclusion: If the new IADPSG criteria will be adopted in Hungary, the prevalence of GDM will be doubled (even in the absence of the 1h glucose during the OGTT compared to the prevalence based on the WHO criteria that is currently used).
Gestational diabetes: determination of risk factors for diabetes mellitus

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Objectives: In the last decade the risk of developing Diabetes Mellitus (DM) after Gestational Diabetes (GD) has more than doubled. The aim of this study was to identify predictive factors to DM’s development in women with history of GD. Materials and Methods: An observational, analytic, cohort retrospective study, based on consultation of medical records of a random sample of women with previous GD diagnosed, since January 1, 2000 to December 31, 2009, followed in Hospital of Braga, was performed. The limit for DM development was the end of 2010. Results: From a sample of 300 women, 32.7% developed DM. Family history of type 2 DM, maternal age at diagnosis, postpartum body mass index (BMI), 4 abnormal values in the oral glucose (100g) tolerance test and fasting glucose level, although had presented association with DM’s development, none proved to be a predictor factor. The probability of DM’s development after GD was increased by 8.2 times with gestational age less than 24 weeks at diagnosis (OR=8.191; p<0.001), 3.4 times with the need of insulin therapy (OR=3.358; p<0.001) and 3.1 times with previous pregnancy BMI equal or superior to 26.4 kg/m2 (OR=3.074; p=0.003). A logistic regression analysis was performed and the developed model presented 75.5% of sensibility and 74.3% of specificity (G2=87.49; p<0.001; Nagelkerke’s R2=0.353). Conclusions: In this study three studied variables were demonstrated to be risk factors to DM’s development in women with GD history. These results promote the development of preventive strategies to reduce mortality and morbidity associated to DM.

Factors predicting the need of additional insulin in GDM-patients on metformin

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Objectives: Metformin is increasingly used as a therapy in gestational diabetes (GDM). In some patients, additional insulin is needed to maintain normoglycaemia. Our aim was to characterize GDM-patients on metformin needing additional insulin. Materials and Methods: We conducted a single centre randomized controlled study with non-inferiority design comparing metformin and insulin in the treatment of 216 GDM-patients. In order to characterize and identify mothers needing insulin in addition to metformin, we divided metformin treated patients (n=109) to the subgroups of metformin only (n=86) and metformin with additional insulin treated patients (n=23). Results: Patients needing additional insulin with metformin were significantly older (p=0.04) and needed medical treatment earlier in gestation (p=0.004) than patients treated with metformin only. Furthermore, HbA1c and especially fructosamine values were higher at randomization (p=0.01 and p<0.001, respectively) in patients needing additional insulin than in patients treated with metformin only. The differences in fructosamine and HbA1c-values remained significant (p=0.003 and p=0.01, respectively) between the groups after adjusting with maternal age, gestational weeks at oral glucose tolerance test, and gestational weeks at randomization. Conclusions: We studied several predictive factors, and fructosamine seems to be a particularly promising tool in evaluating the need of supplementary insulin in metformin treated GDM-patients.
The association between “two step” glucose screening results and pregnancy outcome in Turkish population

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Objective: We aimed to investigate maternal and fetal outcomes in the pregnant women screened for gestational diabetes mellitus, to compare maternal and fetal outcomes between each other. Materials and Methods: 3961 pregnant women attending to the Keçiören Research and Education Hospital between December 2008-2011 were recruited retrospectively. All antenatal and postnatal data were collected from the patient records. The maternal and fetal outcomes include gestational age at birth, preterm birth, birth weight, low birth weight (<2500 gr), macrosomia (>4000 gr), the rate of cesarean section, length of maternal hospitalization, neonatal intensive care unit (NICU) admission and length of the NICU hospitalization. Results: A total of 160 pregnant women (4.0%) were diagnosed as GDM and 151 pregnant women (3.8%) were diagnosed as single value abnormality (SVA). The rate of preterm birth, low birth weight and macrosomia is significantly higher in pregnancies with GDM than control. Mothers with GDM and their infants were at increased risk for preterm birth [2.41 (1.49-3.89)], low birth weight [2.84 (1.62-4.98)] and macrosomia [2.41 (1.47-3.93)]. Although we didn’t find any differences in the rate of macrosomia, mean birth weight for pregnancies with SGA is significantly higher than the control group. We found significantly higher maternal age and macrosomia in the subgroup of 50 gr GCT between 130-140 mg/dl. Conclusions: All the pregnant women whose 50 gr GCT results were between 130-140 mg/dl and pregnancies with SVA in 100 gr OGTT should be kept in mind for macrosomia and other complications especially for older pregnant women.

Cytokines, apoptosis and growth factors in post-delivery placentas

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Introduction: Maternal-fetal unit faces a large variety of processes, including physical development and protection against possible hazards. Placenta is a key organ of the maternal-fetal interface; findings in placenta can explain gained perinatal outcome. Nuovo in 2006 has suggested that immunohistochemical (IHC) investigation of placenta is much more sensitive than routine examination for establishment of pathological pathways and clinical diagnosis. Aim: To detect cytokines, apoptosis and growth factors in post-delivery placentas. Materials and Methods: IHC was developed for 38 post-delivery placentas of various gestational ages in the Riga Maternity hospital in 2010 – 2011, detecting growth and development, degradation factors, and apoptosis as well as inflammation markers. Study was approved by the Ethics committee of Riga Stradins University. Clinical data were acquired from the medical chart and survey. Results: Positive structures of IGF1, HGF and FGF and IGFR1 and FGFR were present in all the placentas; expression decreased with an advanced gestation. Larger number of IGF1 positive structures was seen in clinically beneficial cases of prematurity, whereas FGF was more expressed in cases with negative outcome. IL-10 in general was evidently more expressed than IL-6; no correlations with gestational age, but IL-10 less expressed in smaller (for gestation) babies. Number of apoptotic cells varied with less expression in placentas of term healthy babies. Conclusions: Expression of growth factors in placenta changes with the course of pregnancy and influences maturation of fetus. Placental growth probably correlates with its anti-inflammatory capabilities. Problems in pregnancy are associated with increased apoptosis in placental tissues.
Retrospective analysis of endocrine disorders in the Maltese pregnant population
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Objectives: Pregnancy in the presence of endocrine dysfunction is known to be associated with a higher risk of obstetric and neonatal complications. This study aimed to investigate the occurrence of endocrine disorders in a cohort of Maltese pregnant women. Materials and Methods: We analysed data from the National Obstetric Information System collected by the Public Health Information and Research Division, Malta for the years 1999-2009. All pregnancies delivering at a viable gestational age and occurring in women with reported endocrine dysfunction were identified and analysed in terms of maternal age, gestational age at delivery, maternal body mass index (BMI), birth weight, Apgar scores and neonatal complications. Results: 163 pregnancies of a viable gestational age were reported in women suffering from known endocrine disorders. Thyroid dysfunction accounted for 84.7% of such pregnancies, hypothyroidism being commoner than hyperthyroidism (84.8% vs. 8% of patients with thyroid pathology). There were no statistically significant differences in maternal age, BMI, birth weight and Apgar scores between these two thyroid subgroups. Furthermore, we identified 20 patients with hyperprolactinaemia, three patients with a known pituitary tumour, two patients with hypopituitarism and single cases of adrenal insufficiency and parathyroid adenoma. Conclusion: To our knowledge, this is the first study investigating endocrine disorders in the Maltese pregnant population. It has shown that thyroid dysfunction is relatively common. The clinical implications of thyroid dysfunction in pregnancy warrant prevalence studies and may justify the need for screening.

Control of gestational diabetes with the newly described instillation of insulin into the auditory channel via a piezoelectric pump: A comprehensive approach and a novel option
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Objectives: To find out kinetics and tolerability of auditory insulin (AI) in pregnant patients compared with 212 non pregnant diabetics. Materials and Methods: Ten pregnant patients with gestational diabetes were treated with AI in one session. The dose was adjusted as insulin equivalent (20IU for BS less than 200 and for each additional 100mg/dl 10 additional units). 24h after discontinuation of treatment instillation was performed 3h postprandial. Four pregnant patients received instillation of AI via a piezoelectric pump for one week. The data of the former and latter group were compared with 212 non and 26 non pregnant diabetics respectively as reported before. Results: All ten patients responded to AI with no local or systemic side effects. The response was comparable with non pregnant cases in a dose basis. All 4 patients showed reduction of FBS, random BS and glycosylated Albumin. The data were comparable to 26 non pregnant patients reported at the 20th international Congress in Montreal 2009. Conclusions: We conclude that auditory insulin as shown before in more than 400 patients is safe and extremely feasible. Instillation via a tiny piezoelectric pump is also of extreme effectiveness in controlling all diabetes parameters. As gestational diabetes is a very special entity in the field of diabetes with major metabolic changes jeopardizing the health of mother and fetus, use of auditory insulin which has shown much promise in a large group a phase III study is underway. The absence of teratogenic constituents in the preparations is another advantage.

Outcomes of pregnancies complicated by gestational diabetes mellitus in Misurata, Libya
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Objective: to determine the maternal and neonatal outcomes in pregnant women with gestational diabetes mellitus (GDM) in Misurata district. Study Design: retrospective study. Subjects and methods: Medical
Records of 1430 without GMD as control and 860 women with GMD who had been admitted into our department between July 2006 and December 2010 were studied retrospectively. Data on pregnancy complications such as miscarriages, congenital anomalies, caesarean sections (CS), urinary tract infections (UTI), pregnancy-induced hypertensions and intrauterine fetal death were collected and analysed using chi-square test and P-value considered to be significant if P< 0.05. Results: Incidence of maternal complications was higher among diabetic compared with the control women (P <0.0001). Of the 860 pregnancies, 95 (11.04%) ended in miscarriage, 32 (3.72%) stillbirth, 19 (2.20%) born with congenital anomalies, 72 (8.37%) delivered with CS because of macrosomia and hypertension and 132 (15.34%) complicated with UTI. Infants of diabetic mothers had a higher incidence of neonatal complications than those of non-diabetic women (49.2%) vs. (17%); P <0.0001). Conclusion: Complications were more common among women in the GDM group than the control group. Improvements may be gained by increase in provision of prepregnancy care and tight maternal hyperglycaemia control.

FC35.01
Is the second booster vaccination mandatory for HBV PMTCT? - Based on the International Cooperative Clinical Study (ICCS)

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Objectives: The ICCS was done to establish the new regimen for HBV PMTCT (prevention of mother-to-child transmission), which should be most economic and realize the smallest patients' load and fewest dropouts by comparing the 3 regimens, i.e., the regimen recommended by the Japan Ministry of Health and Welfare (JMHW-R) in 1985, Inaba Regimen (Inaba-R) established in 1984 by us, and a new Inaba-R (n-Inaba-R) established recently. Materials: Twenty five newborns born from HBsAg-positive Japanese parents, 613 and 36 newborns from HBeAg-positive Japanese and Chinese carrier women, and 158 and 35 newborns from HBeAg-negative Japanese and Chinese carrier women were involved in this ICCS under the IC of the parents. Methods: Three hundreds and seventy two infants received JMHW-R (G0,2/V2,3,5; G represents HBIG, V stands for HB vaccine. 0 means the period within 7 days after birth and the other numbers mean infants' age by months), 135 did Inaba-R (G0/V0,1, 3-5; V0 means the period within 24 hours after birth) and 50 received n-Inaba-R (G0/V0,1). These all infants underwent HBsAg-screening and tests for serum levels of HBsAb, AST and ALT, and Hb, at least for 24 months after birth. Results and Conclusions: Among these 3 groups, no differences were found statistically regarding infants' development of carrier-state, their serum levels of HBsAb, AST and ALT, and their Hb concentration. These results demonstrate that n-Inaba-R is equal to the other 2 regimens (JMHW-R and Inaba-R) with HBV PMTCT. Besides, n-Inaba-R is completed within one month after birth, which dramatically decreases the dropouts.

FC35.02
Sexually transmitted infections and reproductive health of inhabitants of Latvia

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Objectives: As childbirth in Latvia is delayed, maintenance of good sexual and reproductive health, knowledge of prevention, early detection and treatment of STI is very important. Materials and Methods: The third survey of the Reproductive health of inhabitants of Latvia 2003-2011 was carried out in 2011. Responders of reproductive age were chosen using stratified random selection criteria at the place of residence. The sample size was chosen to guarantee at least 250 participants of both genders in the following age groups: 15-19 years, 20-24 years, 25-29 years, 30-39 years, and 40-49 years. All responders completed a self-report questionnaire in the presence of an interviewer. Results: During the time period 2003
– 2011 there was an increase in the incidence of reported Chl.trachomatis infection among 15-24 year old young people, while there was a decrease in the screened population size for STI’s. Youth acknowledge the risk factors for STI’s but they do not identify the risk factors as relevant for themselves – to compare the condom use during the intercourse among young men in age group 15-19, it decreased from 53% to 44% in 2003 and 2011 respectively. When young people believe that they have an STI the first specialist they see is usually their general practitioner (447% in the age group 15-19, 29.8% in the age group 20-24).

Conclusions: There is a need to consider the Chl.trachomatis screening policy among young people seeking reproductive health services. Competency of general practitioners in providing reproductive health services has to be improved.

**FC35.03**

**Effect of the vaginal Vitamin C on the abnormal vaginal environment**

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Objectives: Evaluation of the vaginal Vitamin C efficacy to improve the abnormal vaginal flora. Materials and Methods: Randomized clinical trial of asymptomatic, pregnant and nonpregnant premenopausal women was carried out. Participants with vaginal pH $\geq 4.5$ and abnormal vaginal flora on native microscopy were randomized to the intervention group (received 250 mg Vitamin C containing tablets in the treatment regimen: 6 tablets vaginally once a day at bedtime, and after a week in the maintenance regimen: 6 tablets once in a week) and the control group (did not receive any treatment). Evaluated outcomes were vaginal pH level, microflora type on native microscopy four months after randomization or at least 2 weeks after the last Vitamin C tablet insertion. Results: 140 women with increased vaginal pH and abnormal vaginal flora were recruited, 70 were randomized to the intervention group (42 of them were pregnant) and 70 to the control group (43 from them were pregnant). At the time of abstract submission outcomes were available in 27 participants in the Vitamin C group and in 22 women in the control group. Four months after randomization mean vaginal pH in the Vitamin C group was 4.3 ± 0.4 and 4.7 ± 0.4 in the control group (p=0.0016). Normal vaginal flora on native microscopy were more often restored in the Vitamin C group (21 of 27 participants), comparing with control group (6 of 22 women), p<0.001. Conclusions: The vaginal Vitamin C improves vaginal environment. Further assessment of the results of other participants is necessary.

**FC35.04**

**Influence of socioeconomic factors and smoking on vaginal pH in pregnant women during 1st trimester**

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Objectives: To analyze associations between different socioeconomic factors and abnormal vaginal flora in pregnancy. Materials and Methods: Cross-sectional, observational study was performed from July 2010 to October 2011 in five outpatient clinics in Riga. Pregnant women with elevated vaginal pH and next two ones with normal vaginal acidity during the first antenatal visit were included. Questionnaires about different socioeconomic factors and smoking habits were completed. Samples for vaginal microflora evaluation were taken from upper vaginal wall with subsequently performed native microscopy. Statistical analysis was performed using PASW Statistics 18.0. The study has been approved by the Ethical committee of Riga Stradins University. Results: 122 women with elevated and 253 with normal pH were included. Increased pH and abnormal vaginal microflora were strongly associated with lower educational level - 13/20 (65%) women with basic education had elevated pH and abnormal vaginal flora (p<0,001), the unregistrated marital status (p<0,001), smoking during current pregnancy - 21/33 (64%) smoking women have pH ≥ 4,5 and abnormal vaginal flora and only 101/342 (30%) nonsmoking (p<0,001). Also women’s smoking per lifetime has influence on her vaginal pH – 56/113 (50%) women who ever smoked have increased pH and
abnormal vaginal flora and only 66/262 (25%) who never did (p<0.001). Employment has no statistically significant influence on vaginal pH and flora. Conclusions: Increased vaginal pH and abnormal vaginal microflora are associated with poorer socioeconomic factors and smoking both during pregnancy and ever in the lifetime.

FC35.05
The Status of the Pregnant Women Defence Systems due to Infection with HPV
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The aim of the study: To determine the impact of HPV infection on the antioxidative state of pregnant woman, and to determine the response of local immunity to this infection. Materials and Methods: 213 pregnant women who were attending centres of the Central outpatient clinic of Vilnius city (Lithuania) in 2008-2010 were studied. These women were examined for HPV infection and its type by polymerase chain reaction (PCR). Tests were performed on the 1st and 3rd trimesters. Antioxidative system parameters (malondialdehyde, glutathione) were determined in two samples of blood plasma and cervicovaginal washing fluid collected at the first and the third trimesters of pregnancy, respectively. Local immune system parameters (IL-10, IL-12) were determined in cervicovaginal washing fluid collected in the first and the third trimesters of pregnancy. The statistical analysis was done using SPSS17 and Excel software. Results: At the beginning of the pregnancy (1st trimester of pregnancy), HPV infection was detected in 17.8 % of the pregnant women (38 from 213). At the end of the pregnancy (3rd trimester of pregnancy), HPV was identified in 10.3 % of the pregnant women (15 out of 146); HPV infection was found not to affect antioxidative system. Changes in interleukines (IL-10 and IL-12) concentrations in cervicovaginal washing fluid depend on HPV infection. Conclusion: Our study shows the high prevalence of HPV infection in pregnant women in Lithuania. It could be suggested to study changes in IL-10 and IL-12 concentrations in cervicovaginal washing fluid (local immunity) due to persistence of HPV infection.

FC35.06
Rifaximin in bacterial vaginosis treatment: the VARIANT 1 Study
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Objectives: To evaluate the efficacy and tolerability of two doses (100 mg and 25 mg) of rifaximin vaginal tablets vs. placebo in the treatment of bacterial vaginosis (BV), administered either as 100 mg x 5 days or 25 mg x 5 days or 100 mg x 2 days. BV diagnosis was assessed by both Amsel’s criteria and Gram stain Nugent score. Materials and Methods: This was a multicentre, double-blind, randomised, placebo-controlled study. Patients study eligibility was assessed at the screening visit (V1). At the randomisation visit (V2, up to 7 days after V1), eligible subjects (Amsel criteria ≥ 3 and Nugent score ≥ 4) were randomised to 1 of the 4 treatment groups. Study medication was administered intravaginally daily at bedtime starting from the randomisation visit day for a total of 5 days. At the first follow-up visit (V3, 7-10 days after the end of therapy), patients not cured according to Amsel’s criteria (< 2 criteria) and Gram stain Nugent score (< 3) were withdrawn from the study as treatment failures. Patients showing cure attended the second follow-up visit/final visit (V4, 28-35 days after the end of treatment). Efficacy and safety assessments were performed at each follow-up visit. The primary efficacy endpoint was therapeutic cure of BV assessed by the combined evaluation of Amsel’s criteria and Nugent score at V3; secondary efficacy endpoints were represented by clinical cure by Amsel’s criteria at V3, bacteriological cure by Gram stain Nugent score at V3, and maintenance of therapeutic cure by both Amsel’s criteria and Nugent score at V4. Safety assessments were represented by adverse events, local objective and subjective tolerability (from
patient diary), vital signs, routine laboratory parameters, physical examination findings, and gynaecological findings. Results: One hundred fourteen women were randomised, of whom 103 were evaluable for efficacy. Therapeutic cure rate (Amsel + Nugent) at V3 was highest and statistically significant vs. placebo in the rifaximin 25 mg/5 days group (48%, p < 0.04), followed by 100 mg/2 days (36.0%), and 100 mg/5 days (25.9%), versus 19% in the placebo group. Clinical cure rates (Amsel) were 80.0% in the rifaximin 25 mg/5 days group, 72.0% in the rifaximin 100 mg/2 days group, and 66.7% in the rifaximin 100 mg/5 days group, versus 42.3% in the placebo group. Cure rates evaluated by Nugent score were lower than those evaluated by Amsel’s criteria in all treatment groups, and were identical to the results obtained for the combined (Amsel + Nugent) primary efficacy endpoint. The percentage of patients maintaining therapeutic cure at V4 was higher in the rifaximin 25 mg/5 days group (28.0%) followed by the rifaximin 100 mg/5 days group (14.8%), the rifaximin 100 mg/2 days group (4.0%) and the placebo group (7.7%). No difference in adverse events across treatment arms was observed. Conclusions: Treatment of BV with rifaximin 25 mg vaginal tablet for 5 days showed better therapeutic cure and maintenance of therapeutic cure rates after one month; in particular vaginal tablets containing 25 mg rifaximin were more effective than 100 mg in eradicating BV bacterial morphotypes and enhancing vaginal lactobacilli as assessed by Gram stain (Nugent). We hypothesize that while 25 mg dosage supports recolonization of vagina by lactobacilli, promoting their growth, 100 mg is effective against lactobacilli as well, and therefore the 100 mg dosage can be considered too high to re-establish the normal vaginal flora. The dosage of 100 mg administered for 2 days seemed to be more effective than 100 mg for 5 days at V3, but at V4 the rate of BV recurrence was higher in the 100 mg/2 days group vs. 100 mg/5 days group. Assuming that treatment duration is of primary importance for BV pathogens eradication, a high-dosage, short-term treatment (100 mg/2 days) could be less effective in eradicating BV-related flora.

FC35.07
Successful treatment of 149 patients with chronic refractory vaginitis with a novel pegylated Vanadium compound
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In a phase I trial based on preclinical and toxicology studies; we treated 149 patients with refractory vaginal discharge of different etiologies with the most active of twelve pegylated Vanadium compound studied. With strict eligibility criteria, patients with vaginal discharge of longer than six months duration who failed to respond to three local and at least two systemic treatments were enrolled. At beginning, patients with acute or chronic PID or cervical ulcerations were excluded but as the response of the first few patients was excellent they were also included although their data were evaluated separately. Patients were studied with physical exam, if needed colposcopy, routine labs, liver and kidneys functional tests, urinalysis, culture, antibiogram and vaginal culture for bacteria and fungi. In very special cases smear and culture for Trichomonas were also done. Patients received a single session of local vaginal washing with the solution. Re-examination and culture after one week was performed. Ninety three, 31 and 7 patients responded completely after the first, second and third session with a complete response rate of nearly 88%. Patients’ compliance was excellent and nobody showed major side effects. Rarely, contact of the anterior urethra caused minor dysuria. One patient showed a diffuse symptom free vaginal whitening with fungal superinfection which was successfully treated with the same solution plus Itraconazole. Symptoms due to PID waned and cervical ulcers healed in almost all patients in question. Bacterial vaginitis responded best while fungal and Trichomonas (probably) vaginitis responded later but completely as well.

FC36.01
Pregnancy outcome in obese women over 23 months in a single centre
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Objectives: The aim of this study was to analyse the mode of delivery and outcome according to BMI for obese women in our population. Materials and methods: We conducted a retrospective observational study on delivery records from January 1st 2010 to November 30th 2011. Women were included if the prepregnancy BMI was above or equal 30kg/m². We analysed the rate of induced labour, the mode of delivery, the rate of macrosomia, maternal and neonatal morbidity, gestation age at delivery, according to maternal BMI. Results: 197 women (4.47% of deliveries) were included in our study, with 19 (9.6%) with a history of bariatric surgery and 12 (6.1%) with pregestational diabetes. Mean gestational age at delivery was 39 weeks and 2 days of gestation, with 11(5.6%) premature births. Macrosomia (>4000g) was observed in 31 (15.7%) of neonates. Overall, maternal morbidity during pregnancy occurred in 90(45.7%) women. It included diabetes for 60 (30.5%) women. Neonatal morbidity affected 17 (8.6%) neonates. Caesarean section was indicated for 80 (41%) women, with a constant raise from 32% to 83% in the 30.0-34.9 and >50.0kg/m² groups respectively. The only vaginal delivery in the >50.0kg/m² group was a medical termination of pregnancy. The emergency caesarean section rates were 27.6% and 34.1% in the spontaneous onset of labour and induced labour groups respectively. Vaginal operative delivery rates were constant in all BMI groups. Conclusions: Caesarean section rates increase rapidly with pregestational BMI. Maternal and neonatal morbidity are high in this population.

**FC36.02**  
Successful management of pregnancy after bariatric surgery  
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Objectives: Audit outcomes of pregnancies after bariatric surgery using locally established pathway of care as no official guidelines on follow up of pregnancy post bariatric surgery are available. Methods: There were 22 pregnancies in 20 patients. Nineteen patients were monitored from the beginning of the pregnancy and 1 patient was referred to us at 20week of gestation. Follow up started immediately at the beginning of pregnancy when patients were instructed over the phone about supplement changes. Blood profile was taken every trimester, dietician follow up was every 8-12 weeks, surgical follow up every 3-6 months as well as obstetrical follow up. Results: Eighteen patients had some vitamin or mineral deficiency throughout pregnancy which was corrected and 3 patients had obstetrica l complication in antenatal period. The patient who was referred late and had emergency Caesarian section at 30weeks, others gave birth at 38-42weeks to healthy children. Conclusion: Our pathway of follow up of pregnancies after bariatric surgery has satisfactory results and as shown any delay in referral to bariatric multidisciplinary team can lead to adverse foetal outcomes.

**FC36.03**  
Body mass index associated with the number of pregnancies in women referred to health centers  
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Introduction: Anthropometric applies throughout the lifetime, not only for individual assessment, but also to reflect health status and social and economic conditions populations. Obesity is created for any reason, Should be treated as a chronic disease. Pregnant women are considered among the most vulnerable groups of any population and are required to receive health services appropriate and timely. Pregnant women are suffering from a variety of problems during the ninth month of pregnancy. Methods: This is a descriptive - analytical and Researcher chose the research environment as cluster sampling method from 4 to Geographic . Information was gathered through a questionnaire made, Regular interview and measured weight and height to 300 women referred to health centers. Results: Results showed body mass index was 47 percent overweight and 24 percent obesity and Severe obesity. Were only 7/1% low-weight. There was also significant correlation between BMI with age and parity. The majority of women age with 26/7 % was between 25-20 years and the majority were married(90/3). Their job housewife (80%). Majority with 39/7% had primary education up to sixth. With 66/3% did not mention a specific disease. Results also showed with 69/7% number of pregnancies was 2-1 times. Discussion: Increasing weight and obesity greatly
increases the economic costs of health care. Due to poor awareness of pregnant women seems necessary development and execution of educational programs and prenatal care. Education and increasing women's education level has significant role in the health state of mothers and children.

FC37.01
Why should we train the trainers? Answers after 24 TTT courses
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Objectives. ENTOG demanded of EBCOG that trainers are at least minimally trained. Two gynecologists from Slovenia were trained at the RCOG course for the EBCOG trainers. Materials and methods. Since 2008, they organized 24 Training the trainers (TTT) courses in the University Medical Centre Ljubljana, Slovenia. Later on, pediatric neurologist, psychiatrists, and medical biochemist, together with young gynecologists, joined the faculty. Results. More than 150 physicians from 28 specialties participated. Courses were interactive, with around 15% of time of lectures and 85% of time of discussion and feedback. In basic courses topics were: basics of adult learning; ideal trainers in the eyes of trainees; how to give proper feedback to improve education; cognitive skills training in four steps; difference between assessment and appraisal; basic communication – how to conduct introductory interview with trainee; self-reflection; how to cope with stress; basic lessons on empathy. In advanced Training the trainers courses (TTT2) among the topics were: difficult trainee; how to bring bad news; basics of negotiations; how to avoid burn-out; how to teach professionalism; basics of mnemotechnics. Conclusions. TTT gives trainers tools to deal better with adult education. To improve training comprehensive strategy is needed besides TTT courses, starting in medical schools with tutorship focused on teaching professionalism; appropriate entrance interview into training; good standards of training, updated curricula and log-books; multi-source feedback; mandatory simulation training before laparoscopic operations and elsewhere where appropriate, etc.

FC37.02
Achieving competence in practical procedures in obstetrics and gynaecology - a trainees’ perspective
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Background: Obstetrics and gynaecology, is a surgical speciality that like all other crafts relies upon practice to acquire skills. The recent changes to training in the UK, has led to a dramatic reduction in operative experience and opportunities to carry out practical procedures. Aim: We designed a project that assessed the number of sessions trainees spent in elective and emergency settings in Obstetrics and Gynaecology and the number of practical procedures each trainee carried out on a weekly basis. The procedures assessed were those necessary for core trainees to be competent in before they can progress. We also assessed trainees’ perception of competence as opposed to standards of competence set by the Royal college of Obstetricians and Gynaecologists. Method: We asked trainees to complete an initial questionnaire stating how many procedures they had carried out so far in their training and which procedures they were signed off as competent. They then filled a weekly questionnaire stating the number of procedures carried out that week. We also carried out interviews with senior and junior trainees assessing their perception of competence. Results: Our pilot study so far has revealed that trainees are carrying out a small number of practical procedures on a weekly basis. They also revealed that trainees and trainers vary greatly in their view of competence and there is variation amongst trainees in how many procedures they need to complete before they deem themselves as truly competent. Conclusion: We will continue this pilot study and collect further data.

FC38.01
From PERISTAT I to EURO-PERISTAT IV: 12 years of working together on European perinatal statistics
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Introduction: All EU countries have legal requirements about the minimum data set that should be collected for each birth, but differences exist between countries concerning which indicators are included, their definitions, and the limits for registration of births. The Euro-Peristat projects funded by DG-SANCO’s Health Monitoring and Public Health programmes have addressed these issues. Material and processes: The first project had two major objectives: developing a common set of indicators and collecting data to assess feasibility. In the second project: (i) the 10 new EU countries entered the group; (ii) representatives of midwifery were included; and (iii) working-groups were established to develop indicators for topics where current indicators required development including maternal morbidity and social disadvantage. Data were again collected on Euro-Peristat’s recommended indicators. The third project produced the first European Perinatal Health Report (EPHR) and enhanced connections with policy makers. The fourth project, from January 2012, focuses on sustainability for perinatal health monitoring and producing a second EPHR. Results: The indicators list included 10 core indicators (10) as well as 24 “recommended” and “to be developed” indicators. Outcomes on all indicators differed widely between the countries of Europe. The highest mortality rates were approximately 3.5 times higher than the lowest. No country tops every list. Understanding the reasons behind these differences can provide insights for prevention. Conclusions: The full value of having EU level indicators will only be realised when these data are compiled routinely and change can be assessed. Routine reporting of EURO-PERISTAT indicators is the next goal.

**FC38.02**
Perimortem Cesarean section on a patient with intracranial hemorrhage

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The term of perimortem Cesarean delivery was introduced first in 1986 to refer to the delivery through the application of Cesarean section during maternal cardiopulmonary resuscitation (CPR). Perimortem Cesarean section was performed at the 60th minute of arrest on a 36-year-old multiparous pregnant woman who was at the 36th week of gestation and went into cardiac arrest because of intracranial hemorrhage. Although, the USG scan that was performed before the delivery did not reveal fetal cardiac activity, the infant was kept alive for 36 hours in the intensive care unit. Before the perimortem Cesarean section, the premature heart rhythm of the mother turned into pulseless electrical activity and ventricular fibrillation was observed after the delivery. Despite the defibrillation, thoracotomy was performed and open cardiac massage was applied subsequently since “the mother had no pulse”. After the application, the pulse rate of the mother was determined as 121/min and arterial pressure (AP) was 148/90 mm Hg. The patient was kept alive for 2 hours and 45 minutes and was declared clinically dead since she did not respond to CPR. The interval between cardiac arrest and Cesarean section, gestational week, the presence of fetal cardiac activity and the performance of continuous CPR following cardiac arrest are the most significant factors that affect prognosis in the application of perimortem Cesarean section.

**FC38.03**
Undifferentiated connective tissue disease and pregnancy: a possible approach for the good maternal-foetal wellness

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Undifferentiated connective tissue disease is a systemic autoimmune disorder suggestive of a connective tissue disease but not fulfilling all its diagnostic criteria. In pregnancy it can increase risk of foetal and maternal complications. We report a case of a young woman affected by undifferentiated connective tissue disease, whose fetus had a second-degree heart block evolved to a complete one at the birth, despite the immunomodulatory therapy, and who underwent cesarean section because of placental abruption.

**FC38.04**
Cervical pessaries for preventing preterm birth

**Dimitrios Zacharakis, G Daskalakis, N Papantoniou, M Theodora, G Vlachos, A Antsaklis**
Objectives: It is recognized that a short cervix detected by transvaginal ultrasound before 26 weeks of gestation is a strong predictor of spontaneous preterm birth for both singleton and twin pregnancies. Aim of this study was to determine whether the placement of a cervical pessary might reduce the incidence of spontaneous delivery for both singletons and twin pregnancies, in women with a mid-trimester short cervix.

Materials and Methods: A randomized controlled trial, in which all women with singleton or twin pregnancy, that found to have a cervix of ≤25mm in length during routine ultrasound scan at 18-25 weeks of gestation, were randomized in two groups. A flexible silicone pessary was placed at the time of diagnosis in all patients allocated into group A. The pessary was removed by a single vaginal examination at 37 weeks or earlier in cases of onset of labour, of premature rupture of membranes, of vaginal bleeding or for medically indicated preterm induction of labour or elective cesarean section. Irrespective of the allocation group, all women received a prophylactic dose of progesterone (200mg vaginal capsule per night until 34 weeks).

Results: A total of 98 women with singleton pregnancy and 15 women with twin pregnancy were recruited in the study. For singleton pregnancies, spontaneous delivery before 34 weeks was less frequent in group A (pessary group) than in group B (expectant management group) (5.7% vs 13%). In addition, delivery before 37 weeks was also more frequent in group B (32.6% vs 25%). Regarding twin pregnancies, spontaneous delivery before 34 weeks was less frequent in group A than in group B (12.5% vs 28.6%), while delivery before 37 weeks was more frequent in group A (75% vs 71.4%). The median value of cervical length was 13.88mm for group A and 15.1mm for group B. History of a 2nd trimester pregnancy loss or of a previous preterm birth was present in 26.7% of group A patients and in 26.4% of group B patients.

Conclusions: Insertion of a cervical pessary may be a simple, non-invasive and cost-effective preventive treatment in women with a sonographically detected mid-trimester short cervix.

FC39.01
Can we really blame 'maternal request' for the increasing caesarean section rate?
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Objective: To establish whether Lithuanian women would request elective caesarean section in a low-risk pregnancy, to evaluate their knowledge about the main advantages of different modes of delivery, and to compare how women's opinion has changed over the five years. Materials and methods: A study was conducted from November to December 2006 (n = 204) and from January to February 2011 (n = 239) at the Lithuanian University of Health Sciences Hospital. Self-administered anonymous questionnaires collected information on women's knowledge about the advantages of different modes of delivery and their preferred type of birth in a low-risk pregnancy. Results: In 2011, the same as in 2006, the most frequently mentioned advantage of vaginal delivery is that it is natural, while the advantages of caesarean section are safety for the newborn and the possibility of avoiding delivery pain. Overall, 82.4% of participants in 2006 and 74.5% in 2011 thought that women should be able to choose the mode of delivery in a low-risk pregnancy. If they had had such a chance, 15.2% of women in 2006 and 14.9% in 2011 would have chosen caesarean section without any medical indication. Conclusion: Approximately 15% of Lithuanian women would request an elective caesarean section and this number has not changed during the five-year period. As the national caesarean section rate is increasing annually, it seems that 'maternal request' cannot be blamed for this phenomenon. Despite all the available information about different modes of delivery, women still lack professional and reliable knowledge about it.

FC39.02
Caesarean section during labour – an analysis of high–risk Czech primiparous women in a major perinatal center
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Background: The aim of our analysis was to describe our specific group of high-risk primiparas and to detect potential risk factors of acute caesarean section in our perinatal center with more than 5000 deliveries per year. Methods: A prospective study evaluating parameters of primiparous women with labour at term in our institute. We determined fetal presentation by ultrasound at the beginning of labour. Age, demographic data, risk factors, mechanism of delivery focused on presentation and rotation of the fetus during first and second stage of delivery and obstetric complications were observed. We excluded preterm deliveries, fetuses with breech presentation, multiple pregnancies and elective caesarean sections. Results: There were 1013 primiparas with labour May-December 2011. 19.7% of those delivered by caesarean section, 1.8% by forceps. We detected posterior presentation in 23.3% fetuses at the beginning of labour. Mean neonatal weight was 3360g (min 2130g, max 4820g). Prostaglandins were administered in 20.1% cases. Statistical analysis shows that posterior presentation increases the duration of first (opening) stage by overall 45 minutes, increases risk of caesarean delivery (RR 1.2). It does not affect second (pushing) stage. As expected, prostaglandin-induced labour and fetuses with body weight above 3900g increased risk of caesarean delivery significantly (RR 1.7 and 1.6 respectively). There was no statistical significance concerning maternal age, body mass index or other observed parameters. Conclusion: By analysing our own patients’ data, we determined potential individual risk factors that should be incorporated in delivery management. Posterior presentation of fetuses should be considered before labour induction.

FC39.03
TOLAC and VBAC rate: trends in East-Tallinn Central hospital in years 2006-2010
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Cesarean Section rate is increased in Estonia nearly 3 folds from year 1992 to present day making ca 18-21%, dependant on hospitals. In subsequent pregnancy there are 2 choices to be made: repeated cesarean delivery (RCD) or undergo trial of labor after cesarean delivery (TOLAC) aiming for successful VBAC (vaginal birth after cesarean delivery). Objectives: To evaluate rate of TOLAC in group of women with term (37+0) singleton pregnancies with cephalic presentation of fetus and 1 previous Cesarean delivery in obstetric history and TOLAC success rate, resulting in VBAC. Cases with pathology of placenta, breech presentation, poorly controlled HIV infection or late pregnancy complications were excluded. Methods: retrospective data collection from East-Tallinn Central Hospital’s delivery ward records 2006-2010. Statistical significance calculated using CHI-square test. Results: Throughout observed years there was a steady increase in numbers of TOLAC in investigation group: 2006(101/185)/2007(117/219) compared to 2009(172/256)/2010(189/293), resulting in statistically significant difference in rate of VBAC between two sets of years 2006(35.68%)/2007(32.88%) and 2009(49.61%)/2010(44.37%), p<0.001. TOLAC success rate ranged 61.54%-73.84%. Percentage of operative vaginal deliveries was relatively high (AV. 9.31%), but no statistical significance was found between observed years (p 0.95). Numbers of RCD remained almost the same throughout observed years. Conclusions: our first data shows, that we achieved good results in allowing more women to undergo TOLAC, increasing rate of VBAC during observed years. There was no increase in numbers of operative vaginal deliveries and no uterine ruptures in hospital. Further investigation is needed in terms of obstetric complications during TOLAC.

FC39.04
Correlation between labour outcome and pre-induction Bishop's score
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Background: Induction of labour is performed mainly for post dates and gestational diabetes. It has become the dictum that induction carries a risk of Caesarean section. Aim: To analyse labour outcomes with respect to status of the cervix prior to induction as defined by pre-induction Bishop’s scores. Study design: Retrospective analysis of case notes of 100 women that had induction of labour in Wexford General Hospital, between January 2011 and June 2011. Multiple births and those that had previous Caesarean sections were excluded. Bishop’s score at the time of induction and the mode of delivery was recorded in each case. Result: Of the hundred women induced, 53% were primips and 47% were multips. Bishop’s Score was <7 in 57.4% of primips and 42.6% of multips. Of the primips, 65.3% had vaginal delivery while
34.7% had Caesarean section; 75.8% of multiphas had vaginal delivery while 24.2% had Caesarean section. 36.2% of primips and 63.8% of multiphas had Bishop’s score >7. Of the primips 71.9% had vaginal delivery while 28.1% had Caesarean section; 78.3% of multiphas had vaginal delivery while 21.7% had Caesarean section. Prostin gel was the primary method of induction. The indications for Caesarean section in the primip group was suspected fetal distress and failure to advance. Conclusions: A high proportion of primips undergoing induction of labour required Caesarean sections. Postdates are still the main indication for induction.

FC39.05
Lower uterine segment in previous cesarean pregnant at term: abdominal ultrasound evaluation, decision making and cut-off for eligibility to VBAC. Our preliminary data
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Objective: uterine rupture is the worst complication in vaginal delivery after caesarean section (VBAC). The aim of study is to define utility of sonographic evaluation of lower uterine segment (LUS) in VBAC eligible patients. Methods: observational case-control study, with patients who performed caesarean section (CS): Group-A, multiparous pregnant with single fetus, up to two previous CS; Group-B, multiparous pregnant whit up to three vaginal deliveries and no uterine scars. All patients performed sonographic measurements of LUS and myometrial thickness. We evaluated historical risk factors. During surgery the thickness of LUS was evaluated and assigned to one of four grades. We used Kolmogorov-Smirnov to test normality of distribution. Continuous data have been tested with t-test, categorical variables with chi-square test or Fisher exact test. Statistical significance for p<0.05. Results: among 94 eligible patients, 45 in Group-A and 49 in Group-B. From comparison of variables, we found significant differences between two groups only for age. Only groupA patients showed grade III (2 pt) or IV (3 pt) of LUS at surgery. Conclusions: Sonographic evaluation of full LUS and, when appropriate, of myometrial thickness, in patients with previous CS and interdelivery interval >18 months are important parameters in selection of patients eligible for VBAC.

FC39.06
Obstetric population and Caesarean section rate
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Objectives: The aim of the study was to assess, if variation in the characteristics of the obstetric population explains the variation in the Caesarean section rate (CSR) between delivery units. Materials and Methods: The study included all deliveries in 12 largest delivery units in Finland in 1.1.-30.6.2005 (n=19 764 births). The data were derived from the Finnish Medical Birth Register. The incidence of risk factors known to increase the risk for CS was defined in each hospital. CSR within each of these risk groups (maternal age >35 years, birth weight >4500g, breech, multiple pregnancy, preterm delivery, induction of labor, and previous CS) was calculated. Then, using the CSR within the risk groups of each hospital we calculated the total CSR in each hospital after adjusting the prevalence of risk factors between the hospitals. Results: The actual CSR varied between 12.9% and 25.1%. Also the incidence of risk factors for CS varied significantly. In addition, the CSR within each risk group varied significantly between the hospitals, reflecting different policies in managing deliveries in certain risk groups. After the indirect adjustment of obstetric population, the deviation from the average CSR levelled for 9 hospitals and increased for three hospitals, but the variation remained substantial. The difference in CSR between the highest-rate and lowest-rate hospitals decreased from 12.2 to 8.0 percent units. Conclusions: The characteristics of the obstetric population explain only a minor part of the variation in CSR between hospitals. The main explanation is variation in delivery management policies, which deserves consideration.

FC39.07
Strategies in lowering caesarean section rates in a tertiary university hospital in Greece
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Background: One in two births in Greece is done by caesarean section. Variation of practice among maternity units, both public and private, small and large, is high. The Alexandra Maternity University Hospital has stabilized its rate to 40%, that is the lowest among the large public and private maternity units in Greece. We examine the strategies implemented in our hospital to halt the rising caesarean section rates.

Materials & Methods: Hospital maternity records were scrutinized over the last three decades and caesarean sections analysed according to reasons stated by clinicians and categorized into groups using Robson criteria. Results: Factors contributing to the rising caesarean section rates were medical, cultural and organizational. Interventions were undertaken at clinical level that involved review of the clinical practice guidelines and education of all maternity personnel. At clinical governance level, analysis and modification of practice was based on audit and detailed feedback. Through leadership and better organization of maternity services, barriers to change were identified and challenged. The multifaceted strategies succeeded in reducing the cesarean rates without compromising safety as assessed by the unit’s maternal and neonatal morbidity and mortality. Conclusions: In today’s fiscal environment of limited resources, the high rate of caesareans becomes a central public health issue. Strategies of halting the ever rising trend as implemented in our tertiary hospital, can pave the way for national policies and standards intended to reduce the variation in practice in maternity units and help clinicians make decisions based on evidence about when a caesarean is appropriate.

FC40.01
The relationship between serum lipid profile, fasting serum glucose, serum levels of insulin, insulin like growth Factor-1, growth hormone, insulin-like growth factor binding Protein-3 and bone mineral density in healthy postmenopausal women

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Objectives: To determine the relationship between serum lipid profile, fasting serum glucose (FG), serum levels of insulin, insulin-like growth factor-1 (IGF-1), growth hormone (GH), insulin-like growth factor binding protein-3 (IGFBP-3) and bone mineral density (BMD) in postmenopausal women. Methods: A total of 744 women were classified between ages from 45 to 59 and from 60 to 80 years. BMD was measured in total femur (TF), femoral neck (FN) and lumbar spine (L1-L4). Patients were divided as osteoporotic and non-osteoporotic according to BMD measurements. Serum concentrations of total cholesterol (TC), LDL and HDL cholesterol, triglyceride (TG), FG, insulin, IGF-1, IGFBP-3 and GH were measured. Chi-square, student-t test and Pearson correlation analyses were used. Results: After the age of 60, serum levels of TC, TG, HDL, LDL were significantly associated with osteoporosis in TF and FN. We found a significant relationship between serum levels of IGFBP-3 and osteoporosis in FN, while serum level of GH had a significant relationship with osteoporosis in TF between ages 45 to 59 years. After the age of 60, high serum level of HDL is positively correlated with BMD measurements of TF and FN. Also, high serum level of LDL is adversely correlated with those of FN. Conclusion: In women after the age of 60, high serum levels of TC, TG, LDL and low serum levels of HDL seemed to be significant risk factors for osteoporosis. Additionally, serum contents of IGFBP-3 and GH appear to be significant risk factors for osteoporosis between ages 45-59 years in postmenopausal women.

FC40.02
Follicular dynamics and apoptosis following unilateral oophorectomy

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Ovarian physiology has been based on the assumption that the mammalian ovary has a constant germ cell pool. According to this accepted doctrine primordial follicles, which are limited in number, are depleted through ovulation or atresia. Therefore, the primary goal of this study was to examine the follicle dynamics and morphologic apoptotic changes following unilateral oophorectomy. In order to evaluate the short-, mid-, and long term effects of unilateral oophorectomy, three groups of rats were included in the study. One ovary was removed from each rat on day 0 and used as a control. In group A (n=7), the remaining ovaries were removed via relaparotomy on the 7th day, group B (n=8), the remaining ovaries were removed via relaparotomy on the 14th day, and group C (n=8), the remaining ovaries were removed via relaparotomy on the 42nd day. The changes in the number of primordial, primary, and growing follicles and the difference in apoptotic index were assessed. Even after 10-12 oestrus cycles (in group C) following unilateral oophorectomy, follicle reserve did not show a decrease in the remaining ovary. However, within the growing follicle the ovulatory rate increased. Atretic follicles were elevated contrary to the belief that reproductive functions are compensated as a result of the reduction in atresia. The observations suggest that the number of primordial follicles remains relatively constant.

Prevalence and clinical phenotype of PCOS in an unselected population of Moscow

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Objective: To determine the prevalence of PCOS in a population of unselected reproductive-aged women from Moscow. Methods: 312 unselected consecutive premenopausal women at ages 18–45yr were invited to participate. A standardized history form was completed, with emphasis on menstrual dating and regularity, hirsutism and acne, gynecological history. Serum samples were analyzed. All subjects with abnormal findings were notified of the results of their evaluation, and those individuals were encouraged to undergo further investigation and/or therapy. The presence of PCOS in these unselected women was defined by the presence of ovulatory dysfunction and clinical hyperandrogenism and/or hyperandrogenemia—and the exclusion of other known disorders (Rotterdam, 2003). The surveyed individuals have been divided into groups: 1) no hirsutism/ menstrual dysfunction, 2) menstrual dysfunction only, 3) hirsutism only, 4) menstrual dysfunction and hirsutism. Mean age was 30.2±7.4yr, BMI 24±5.5kg/m². The prevalence of overweight and obesity rates were 17.3%(n=54) and 14.7%(n=46). The prevalence rates of menstrual dysfunction was 12.8%. Hirsutism was found in 9.3%, acne 6.4%, infertility in 2.6%. In this prospective study of an unselected sample of 312 reproductive-aged women, the prevalence of PCOS was 6.4%. Women with menstrual dysfunction only were 17/312(5.4%): prevalence PCOS in this group was 17.6%. Hirsutism without menstrual dysfunction 8/312(2.6%): prevalence PCOS 62.5%. Menstrual dysfunction and hirsutism 21/312(6.7%), PCOS0-85.7%. Conclusions: Prevalence of PCOS in population–6.4%. Prevalence of separate symptoms of PCOS in population is essentially above, than PCOS. At an estimation of the diagnostic importance of clinical phenotype PCOS acknowledgement of the diagnosis in the presence of a combination oligo-/amenorrea and hirsutism is the most probable.
Contraception use and habits: results of study reproductive health of the population, study on the situation in Latvia (2003-2011)
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(2) Riga Stradins University, Latvia’s Family Planning and Sexual Health Association Papardes Zied, Riga, Latvia

Background. This is the third study on public sexual and reproductive health issues in Latvia. The study questionnaire was developed on the basis of a similar questionnaire for the similar studies 1997 and 2003. Aim of study. To assess the level of information on the use of contraceptives, sources of information, habits of use and views regarding contraceptives, the economical aspects of obtaining contraceptives, the most popular contraceptive methods among women, men in different age groups in Latvia in 2011. Methods. Survey was carried out in February - April 2011, surveying a total 1313 women and 1304 men aged 15 – 49. Stratified random selection methods covering administrative territorial and ethnic sign were applied to determine the body of respondents. The collected data were statistically processed, analyzed and compared using MS Excel and SPSS software. Results and Conclusions. Situation regarding contraception choice and use and habits was not changed much to compare with study results in 2003. Latvia’s residents are well informed about contraceptives, but knowledge is not applicable in the real life. The most popular method is condom, 41% of women and 51% of men uses respectively. The hormonal contraception is used by 13% of female respondents and 17% of male respondents’ partners. More than half of women have belief of the harmful effect of hormonal contraception on health. One fifth of female respondents have had the financial difficulty to obtain contraceptives.

Lost from the uterine cavity: laparoscopical removal of two intrauterine devices
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Introduction: There are several reports published in literature about lost intrauterine devices (IUD) as a consequence of uterine perforation. This serious complication occurs at 1/350 to 1/2500 insertions. Misplacement of IUD usually occurs at the time of insertion but isn’t often detected in more than 90% of women for months or years. Many women with IUD perforations remain asymptomatic. The most common presentations of perforation are pain and unexpected pregnancy. Case reports: Two patients presented with lost IUD, found in the abdominal cavity with a pelvic X-ray. The first case was an IUD inserted 5 years ago, with an ultrasound control after insertion. With no associated symptoms, it was concluded that it was expelled. The X-ray after 5 years revealed a pelvic location of IUD. The second case was a woman with left lower abdominal pain and a history of insertion of IUD 48 hours previously. With clinical suspicious and with absent of intrauterine image in ultrasound of IUD, it was performed a pelvic X-ray that confirmed the extra-uterine position. Laparoscopical IUD removal in two cases was successfully performed. Conclusion: Uterine perforation with displacement to the abdominal cavity is an uncommon complication. Lower abdominal pain with a history of insertion of IUD should alert the clinician to the possibility of migration of the device. Confirmation of extra-uterine location can be performed with X-ray and intra-uterine position excluded with ultrasound or hysteroscopy. The treatment is surgical removal, optimally by laparoscopy.
Do young women have problems in contraceptive use in Estonia?

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(2) Tartu University Hospital Women's Clinic, Tartu, Estonia
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Objectives: Abortion rate among young women in Estonia has decreased during the recent decades, but has remained higher compared to Nordic countries, suggesting problems in contraceptive use. Our aim was to investigate factors associated with reliable contraceptive use. Materials and Methods: Data of 848 women aged 16–24 with sexual intercourse experience and in need of contraception (not pregnant, not planning pregnancy) were extracted from the database of population-based cross-sectional survey. Among respondents who had visited contraceptive services (n=573), the association between reliable contraceptive method use during the last sexual intercourse and most recently visited contraceptive service was estimated in logistic regression model (out-patient women’s clinics were taken as a reference group), adjusting for age, ethnicity, smoking status, experience of school-based sexuality education and having had used contraception during first sexual intercourse. Results: Reliable contraceptive methods (hormonal, condom, IUD, emergency pills) were used by 76%, unreliable methods (calendar method, withdrawal, spermicide) by 22% and no contraception by 2% of the respondents. Reliable contraceptive use was associated with visiting youth counselling centre (adjusted POR=1.9; 95% CI 1.0–3.4) and private gynaecological practice (3.0; 1.5–6.0); having received sexuality education at school (2.2; 1.0–4.7); non-smoking (2.5; 1.6–3.8) and having had used a reliable contraceptive method during first sexual intercourse (1.8; 1.1–2.8). Conclusions: This study showed some possible factors that may complicate contraceptive use among young women in Estonia. Provision of contraceptive services targeted to the needs of young people together with school-based sexuality education should be seriously addressed.

Modern features of pharmacotherapy in early periods of pregnancy

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Objectives: To study quantity, nature and expediency of the prescription of drugs for patients in early periods of pregnancy with the threat of miscarriage. Introduction: The use of drugs during pregnancy is one of the least understood aspects of reproductive health. Using drugs in early periods of pregnancy can cause complications such as mental retardation, congenital anomalies, cerebral palsy, spontaneous miscarriage, premature birth, and stillbirth. Objectives: To study quantity, nature and expediency of the prescription of drugs for patients in early periods of pregnancy with the threat of miscarriage. Methods: We made an analysis of 63 sheets of prescription from the case histories of patients treated for threat of miscarriage in early periods of pregnancy. We investigated 11 drugs widely used in prolongation of pregnancy. Results: 11 drugs were studied (Tab.1). 18% of the prescribed drugs are potentially dangerous, i.e., drugs for which there is evidence of risk to human fetus, however, the expected effect of the therapy in pregnant women may outweigh the risks (D to FDA). 9% of drugs were classified as C by the FDA. 45.5% of prescribed drugs were from group B according to FDA. Conclusion: To ensure the safety of the fetus, resolving the question of drug prescription to pregnant women we should: 1. carefully consider the potential benefits of the drugs and its potential harm. 2. avoiding polypharmacy throughout pregnancy, especially in the 1 trimester; 3. monitor the status of the mother and fetus during drug therapy. Keywords: pregnancy, drugs, side effects, fetus

<table>
<thead>
<tr>
<th>Drug</th>
<th>Pharmacotherapeutic group</th>
<th>Classification by FDA</th>
<th>How many women were taking the drug (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Folic acid</td>
<td>Vitamins</td>
<td>A</td>
<td>86.4%</td>
</tr>
<tr>
<td>2. Polyvitamins</td>
<td>Vitamins</td>
<td>C</td>
<td>100%</td>
</tr>
<tr>
<td>3. Dipyridamole</td>
<td>Antiplatelet</td>
<td>B</td>
<td>80.3%</td>
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<tr>
<td>4. Etamsylate</td>
<td>Antiplatelet</td>
<td>B</td>
<td>71.8%</td>
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<tr>
<td>5. Papaverine</td>
<td>Antispasmodic</td>
<td>A</td>
<td>70.2%</td>
</tr>
<tr>
<td>6.</td>
<td>Tranexamic acid</td>
<td>Inhibitor of fibrinolysis</td>
<td>B</td>
</tr>
<tr>
<td>7.</td>
<td>Progesterone</td>
<td>Estrogens, progestins, and their homologues and antagonists</td>
<td>B</td>
</tr>
<tr>
<td>8.</td>
<td>Dydrogesterone</td>
<td>Estrogens, progestins, and their homologues and antagonists</td>
<td>A</td>
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<td>9.</td>
<td>Nadoparin calcium</td>
<td>Anticoagulant</td>
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<td>Glucocorticoid</td>
<td>D</td>
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<td>11.</td>
<td>Methyldopa</td>
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**FC42.02**

**Episiotomy: early maternal and neonatal outcomes of selective versus liberal use**

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Objectives: To determine the impact of selective and liberal practice of episiotomy in early maternal (perineal trauma and complications) and neonatal outcomes. Materials and Methods: An observational, transversal, descriptive and analytic study was conducted in two public Hospitals in northern Portugal, with different policies for the practice of episiotomy: selective practice (Hospital A) and liberal practice (Hospital B), based on consultation of medical records of the women admitted to these services. Results: A total of 397 women was analyzed, 200 in selective group and 197 in liberal group. The groups were similar for the past medical and obstetric history, demographic, biometric, pregnancy and labor characteristics. However, gestational age, weight and head circumference of newborns, as well as instrumentation rate were significantly higher in selective group. Episiotomy was performed in 72.5% of the deliveries in Hospital A and 88.8% in Hospital B (p<0.001). There was less perineal suturing (86.0% vs 95.9%, p=0.001) as well as a greater number of intact perineum in selective group (10.5% vs 3.0%, p<0.001), without differences in lacerations type or degree. On the other hand, the liberal group presented more frequent early perineal complications and higher pain levels in the first postpartum day (p<0.001). No differences were found between groups in Apgar scores, neonatal trauma and Neonatal Intensive Care Unit admissions number. Conclusions: The selective use of episiotomy was associated with better outcomes in terms of perineal trauma and early perineal complications, with no differences in neonatal morbidity. Thus, the liberal practice of episiotomy showed no benefits.

Key words: selective episiotomy, liberal episiotomy, perineal trauma, perineal complications, neonatal outcomes.

**FC42.03**

**Breast changes during Toremifene treatment measured by 3D ultrasound**

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Objectives: Antiestrogen toremifene when administered during luteal phase of the menstrual cycle has shown to reduce premenstrual mastalgia as compared to placebo. The mechanism of action is unclear, but previous studies imply that it may be associated with a diminished blood flow of the breast. The aim of the study was to detect if any changes in breast vascularity and volume between baseline and toremifene cycles can be detected by 3D ultrasound (3D US). Materials and Methods: Twenty healthy premenopausal women were recruited. The first breast 3D US and gynaecological examination were performed during a single non-medicated baseline cycle. During the next cycle the participants received 20 mg toremifene from cycle day 15 until the second breast 3D. The 3D evaluations were performed within 5 days prior to menstruation. The breasts were measured as four quadrants. Volume and vascularisation indices of the each sector were saved. The area of interest was adjusted by manual tracing to include skin at the top and fascia at the bottom.
Results: The volumes of the breast quadrants tended to be higher during treatment with toremifene. The mean gray values were lower during toremifene versus baseline. All the indices of vascularity tended to be higher during toremifene treatment especially on the left, however, vascularisation index was also higher on the upper quadrants of the right side, respectively. Conclusions: As contrasted with previous findings, this study implies that toremifene rather increases than decreases the vascularisation and volume of the breasts, at least in healthy women.

FC42.04
Deep vein thrombosis of the upper limb in a puerperal patient - a case report
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Venous thromboembolism is the leading cause of death in the postpartum period. Although it can occur at any stage of pregnancy, the puerperium is the period of greatest risk. A 25-year-old puerperal woman, gravida 1, para 1, presented to her assistant gynaecologist with complaints of edema, pain and functional disability of the upper limb, 20 days after an uncomplicated vaginal delivery. Clinical examination showed that the patient had pain with venous routes palpation and discomfort with the upper limb mobilization, accompanied by unilateral edema. There was no fever or any signs of respiratory distress. Obstetric history revealed a full term eutocic delivery of a male newborn, with 2760g and Apgar score 9/10. This pregnancy had had a normal evolution, with adequate prenatal monitoring, normal obstetric ultrasounds and third quarter analytical study unchanged. The early postpartum period passed without complications and she was discharged asymptomatic at the 2nd day of hospitalization. Given the high suspicion of Deep Vein Thrombosis of the Upper Limb, the patient has been hypo-coagulated with Low Molecular Weight Heparin, completing 6 weeks of treatment, and simultaneously instructed to practice measures such as limb elevation and application of elastic restraint. The case presented demonstrates the high morbidity associated with thrombotic events. The puerperium is a risk factor for thrombotic events in women, even in those that have no previous indication for obstetric thromboprophylaxis. The correct diagnosis of venous thromboembolism involves a high clinical suspicion, and among women with clinically suspected Deep vein thrombosis should be initiated anticoagulant therapy.

FC42.05
Early onset severe preeclampsia: maternal and perinatal outcomes according to management
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Objectives: To determine maternal and perinatal outcomes after conservative or aggressive management of severe preeclampsia, between 24 and 33+6 weeks gestation. Materials and Methods: A retrospective analysis of early onset severe preeclampsia in 204 women managed at Sant’Anna Hospital (2004-2010) was carried out. Conservative treatment was given to 64.2% (glucocorticoid therapy followed by careful monitoring of maternal-fetal conditions aimed at prolonging pregnancy) and aggressive treatment to 35.8% (glucocorticoid therapy followed by delivery within 48 hours). Results: The main indications for delivery were maternal (76.3% in the group treated aggressively and 57.3% in the group treated expectantly) such as warning symptoms, HELLP syndrome, persistent oliguria, uncontrolled hypertension. No statistically significant difference was observed in maternal complications between women treated conservatively and aggressively (renal failure 0.97% vs 1.4%, eclampsia 0% vs 1.4%, pulmonary edema 0.97% vs 1.4%). The HELLP syndrome incidence was higher in the interventionist management group: 28.8% vs 11.6% (OR 3.13 IC 95% 1.49-6.67). In the expectant group, we observe a decreasing trend, albeit not statistically significant, in the incidence of perinatal complications as fetal and neonatal death 3.4% vs 3.8%, intraventricular hemorrhage grade 3 and 4, 2.4% vs 4.3% and respiratory distress syndrome 23.8% vs 42%. No cases of necrotizing enterocolitis were observed and no difference in small for gestational age was recorded (11.4% vs 11.6%). The overall incidence of complications was similar to those reported in the literature. Conclusions: Considering our results, expectant treatment improves perinatal outcome in a select group of women with severe early onset preeclampsia.
FC42.06
Vaginal birth after Cesarean section (Trial of scar)
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Every hospital equipped for obstetrical care should be able to offer women vaginal delivery after previous cesarean section. The success rate for labor and vaginal delivery following previous cesarean section will vary from 50-80 percent. This study is a prospective study for one year duration, hundred selected patients with one previous cesarean who went to spontaneous labor, managed at Obstetrics Department in Misurata Central Hospital, analysis of labor outcome in relation to maternal age, height, birth weight and indication of previous cesarean section. All the data were coded and statistical analysis was performed using p-value to investigate the association between the variables. The study was concluded that the maternal age has no influence of the outcome of labor after cesarean section but maternal height, previous indication of cesarean section, and birth weight have a greater influence of labor outcome once the uterus has been scarred. The success rate for trial of scar in this study was 88% which is slightly higher than the rates reported from other studies because of patient selection. The desires for large family in arabic society enhance the acceptance of patients for trial of vaginal delivery after cesarean section. So, provided that there is no cephalopelvic disproportion and other pregnancy complication patient with previous one cesarean section can be safely allowed a trial of vaginal delivery.

FC42.07
Rupture uterus following previous Caesarean section in the second and early third trimester of subsequent pregnancy
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Three cases of rupture uterus following Cesarean section in patients who were not in labour. Rupture uterus following lower segment caesarean section usually occurs in labour. There is an association between abnormal implantation of the placenta 10% penetrates beyond endometrium to deeper layers leading to risks of bleeding; prematurity; hysterectomy and ITU admission. 1) 34yrs G5P3 (Cs x2, SVDx1, 1 miscarriage) admitted with pain and fainting at 25/40, deteriorated so needed laparotomy, at surgery, large haemoperitoneum; left sided (5x8cm) uterine rupture, male baby delivered by classical Caesarean died immediately, unable to stop bleeding so subtotal hysterectomy performed, had blood transfusion and admitted to ITU. Histology placenta percreta. 2) 27yrs G3P1 (Cs x1, x1 STOP) known bicornuate uterus, anterior low lying placenta, admitted with massive APH at 29/40 needing emergency classical Caesarean, at surgery there was left sided (10x8 cm defect) uterine rupture, found haemoperitoneum, female fetus good condition died later. Uterus re-constructed; bleeding managed with Rusch balloon, medicines, blood transfusion. HDU care. Histology placenta Increta. 3) 39yrs G6P3 (x3 Cs, miscarriage, 1 Top) known posterior placenta praevia, cerclage in situ, admitted with APH and fetal distress at 33/40, emergency Caesarean, baby boy good condition, uterine rupture and placenta accreta. PPH; failed conservative management; needed subtotal hysterectomy, blood transfusion and ITU Admit. Histology Placenta accrete. Maternal and fetal morbidity and mortality from abnormal placentaion could be catastrophic. Rising incidence of Cesarean sections, increasing maternal age, the number of cases of placenta praevia and its complications, including placenta accrete/percreta, will continue to increase especially with recent NICE guidance.

FC42.08
Factors associated with unplanned pregnancies among different ethnic groups in Estonia
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(3) University Hospital Women's Clinic, Tartu, Estonia

Objective: The study was designed to assess selected factors and violence experience associated with unplanned pregnancy among 16-44-year-old pregnant women who have decided to give birth among Estonian and Russian-speaking study group in Estonia. Material and Methods: The data came from
unselected cohort study BIDENS. In Estonia five antenatal clinics were included. Women were invited at an antenatal visit at gestational age 17 to 28 weeks. The total number of participants was 977 of whom 768 (78.5%) chose the questionnaire in Estonian and 209 (21.4%) in Russian language. The associations between unplanned pregnancy and socio-demographic factors, reproductive health, risky health behaviour (smoking and alcohol consumption) and lifetime violence experience were investigated using the $\chi^2$ test. 

Results: Preliminary data showed that the prevalence of unplanned pregnancy was lower among Estonian-speaking women compared to Russian-speaking women (respectively 20.4% and 30.8%, $p<0.002$). Estonian-speaking women, who reported unplanned pregnancy, differed significantly ($p< 0.05$) in age, education, occupation, marital status, economical status, parity and previous abortions compared to women who had planned pregnancy. Among Russian-speaking women we found statistically significant associations with education and marital status only. Risky health behaviour and violence experience were associated with unplanned pregnancies in both study groups. Conclusion: Unplanned pregnancies account for substantial proportion of all pregnancies in Estonia. The importance of different factors associated with unplanned pregnancy varies between two ethnic groups. In order to plan and design culturally targeted interventions to prevent unplanned pregnancies, it is crucial to understand socio-demographic and behavioural determinants in different ethnic groups.

FC43.01
Association between pelvic organ prolapse and bone mineral density in postmenopausal women
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Introduction and hypothesis: Our study aimed to determine the association between pelvic organ prolapse (POP) and bone mineral density (BMD) of lumbar spine and femur neck. Methods: We selected 531 postmenopausal women between 50 and 79 years of age and divided them into two groups (with and without POP). We compared the BMDs of lumbar spine and femur neck between POP and non-POP group, and among stage of POP. We also compared the frequency of osteoporosis between POP and non-POP group. Results: After adjustment for age, years since menopause, height, weight, BMI, and vaginal delivery, the BMDs of both lumbar spine and femur neck did not show the significant difference between POP and non-POP group. However, both lumbar spine and femur neck BMD are positively correlated with the severity of POP. The frequency of osteoporosis of femur neck was higher in POP group than in non-POP group over 60 years of age and that of lumbar spine was higher in POP group in age of 60-69 years. Conclusion:Our study may suggest that we have to manage postmenopausal women with POP timely for reducing the risk of osteoporosis and osteoporotic fracture.

FC43.02
Women’s perceptions about reasons of unwanted pregnancies among young women in Latvia
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Objective: is to understand women’s convictions about reasons for unwanted conception among women who are seeking first pregnancy termination in age group 16 – 25 years in Latvia. Method: 144 women from all Latvia who were performing first pregnancy termination were included in study. Data were obtained by using semi-structured anonymous questionnaire, that included one open question about women’s own beliefs why unwanted pregnancy had occurred. Results: 95 women answered this question. Average age of women included in study was 19,88 (±2,4) years. Only 7%(n=6) of women states they don’t know the reason. 45%(n=43) of women attributes to external causes (e.g. partners responsibility or method failure). 48% of women refers to internal causes – one owns behaviour(e.g.I did not use contraception), believes(e.g. I believed that I am infertile) or ones state of mind(it happened by inattention). Referal to external causes can be explained by attributional theory,more precisely self-serving bias – that means people are tended to explain negative behaviors of oneself with external causes in order to persevere positive self image. Conclusions: Language markers are meaningful in understanding how people believe something has happened to them. Almost half of all women reports external causes. It should be kept in mind when counseling about contraception, particularly post abortion. Consultations should be more focused on
counseling about precise usage of contraception. Although believes and values can be clarified and addressed, consultant should keep in mind that external attribution is normal reaction and will be executed by great proportion of healthy individuals.

FC43.03
Prenatal surgery in a triplet pregnancy complicated with a double Twin Reversed Arterial Perfusion (TRAP) sequence
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(2) University Hospitals Leuven, Departement of Obstetrics and Gynaecology, Division of Woman and Child, Leuven, Belgium

We report the first case of a successful antenatal intervention for a double twin reversed arterial perfusion (TRAP) sequence in a monoamniotic monochorial triplet pregnancy. This extremely rare finding was first diagnosed with the first trimester ultrasound. Fetoscopic coagulation and transsection of the umbilical cords of both acardiac members was performed at 16 weeks of gestation. The immediate postoperative course was complicated with iatrogenic PPROM, which was successfully reversed with an amniopatch procedure. Consequent sonographic assessments showed a healthy fetus with normal growth and development, together with progressive atrophy of the acardiac fetuses. Structural evaluation of the face was complicated because of the attenuated amniotic fluid and unfavorable fetal position and we could only diagnose a palatoschizis relatively late in pregnancy.

FC43.04
Alfa 1 antitrypsin activity in human amnion epithelial cells
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University of Torino, S.Anna Hospital, Department of Obstetrics and Gynaecology, Torino, Italy

Objectives: Takashima in 2004 suggested that the amnion protects itself from digestive enzymes by the secretion of Alfa1-antitrypsin (AAT). This hypothesis suggested that an increase of AAT production in the amnion may prevent premature rupture of membranes. The aim of this study was to define the best method to isolate cells producing AAT from the amniotic membrane. Materials and Methods: Amnion derived cells were obtained from caesarian section births in healthy women. The phenotype of cells were elucidated in histologic sections of AM by antibodies directed to epithelial and mesenchymal cells: cytokeratin 7 and AE1/AE3, vimentin, desmin, AAT. We applied two protocols: digestion with trypsin (T) and collagenase (C). Cells were characterized by immunohistochemistry. Results: Mesenchymal cells (MC) on the histologic sections were positive for desmin and vimentin (specific for MC), while AECs showed a co-expression of epithelial and mesenchymal markers (cytokeratin 7 and AE1/AE3 and vimentin). Some AECs stained for AAT, whilst others were negative. All cells expressed both cytokeratin and vimentin but only cells treated with C were positive for AAT. Cells treated with T showed a tendency to form clones, whereas, cells treated with C tended to form a monolayer. This is probably due to the different grade of functional differentiation. Conclusions: Protocol including digestion with collagenase allows for the selection of AECs which are capable of expressing AAT. This is the starting point to characterize the role and function of these cells and opens the road for future research and clinical application of these powerful cells in human cell therapy.

FC43.05
Introduction of enhanced recovery principles for patients undergoing abdominal sacrocolpopexy at QA Hospital, Cosham, United Kingdom
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Queen Alexandra Hospital, Department of Obstetrics & Gynaecology, Portsmouth, United Kingdom

Objectives: Introduce the generic principles of Enhanced Recovery in patients of Abdominal Sacrocolpopexy. Methods and Materials: All patients were examined by operating surgeon in the clinic, expected length of stay was discussed and patients were involved in decision making about the discharge
Patients were admitted on the day of surgery, operated by the consultant urogynaecologist in the morning list under general and spinal anaesthesia. Discharge letters were done by the surgeon on the day of surgery and expected date of discharge was documented and discussed with patient. Patients were provided adequate analgesia but systemic opioids were avoided. Dedicated nurses on the ward encouraged patients to mobilise ASAP. Results-20 patients of abdominal Sacrocolpopexy were put on ER pathway over a period of 10 months. 84 percent patients were discharged within 72 hrs of surgery. 16 percent had medical reasons for longer stay. Followup appointment given to all patients. 84 percent patients were happy with the results of surgery. One patient developed neuropraxia after the surgery. Conclusion Enhanced recovery can be used to improve the quality of care and is safe in patients of abdominal Sacrocolpopexy.

**FC43.06**

**Treatment of interstitial twin pregnancy with Methotrexate: a case report**

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Background An interstitial twin pregnancy is a rare and life-threatening condition for which several treatment options are available. We present the case of an unilateral interstitial twin pregnancy treated with multi-dose methotrexate (MTX). Case A 37-year-old nulliparous woman was admitted to our emergency department with a history of amenorrhea and slight vaginal bleeding. Her serum $\beta$-human chorionic gonadotropin ($\beta$-hCG) was 43518 IU/L and transvaginal ultrasound revealed an interstitial twin pregnancy of 7 weeks gestation. One of the gestational sacs showed a fetal pole without heart activity, the other with heart activity. Gestational sac measurements were 60x24x28 mm. Her vital signs were stable, there was no sign of uterine rupture and because of a strong wish to preserve her fertility we decided to treat her with multi-dose MTX, 50mg/m² MTX intramuscular on day 1,3,5,7, alternating with levofofolinic acid (0.05 mg/kg) on days 2,4,6,8. During follow-up, serum $\beta$-hCG rose for a few days, then started to decline steadily until it normalized on day 63. The patient was discharged from hospital after 8 days and followed in an ambulant setting. Transvaginal ultrasound was performed at every control and revealed no abnormalities. 2 years later she had a normal pregnancy and delivery. Conclusion Multi-dose systemic MTX is a safe and effective treatment option for interstitial pregnancy when fertility preservation is desirable, even in case of a twin pregnancy with high serum levels of $\beta$-hCG.

**FC43.07**

**Three recurrent ectopic pregnancy on the same side following ipsilateral partial salpingectomy**

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Ectopic pregnancy occurs in 1-2% of sexually active women of reproductive age. 7% of ectopic pregnancy occurs in women with previous ectopic pregnancy. Recurrence rate after salpingectomy is 10% and 15% after salpingostomy. There is increasing incidence of ectopic pregnancy. Factors affecting the incidence are PID, previous surgery, assisted reproductive technology, earlier and more accurate diagnosis. We present a case report of a patient with the third ectopic pregnancy on the same side despite previous ipsilateral partial salpingectomy. The 2nd & 3rd ectopic pregnancies were cornual/interstitial ectopic pregnancy on the same side. A 28 yr old para2+2 presented in gynae emergency with P V spotting and no abdominal pain. History of two previous ectopic pregnancy on the same side within nine months. The first was left tubal ectopic treated surgically with left salpingectomy. The second was a cornual ectopic pregnancy. This was also cornual ectopic treated surgically. Pelvic ultrasound on the day of presentation showed live left cornual ectopic with BHcg value of 14,913 IU. This was a confirmed at laparoscopy and treated surgically. Post-operative followed up serial BHcg were 5416 IU on day 3, 1605 IU day 5 and 28 IU day 14 post op respectively. The histology confirmed product of conception. In conclusion three recurrent ectopic on the same side within one year is a very rare presentation despite normal tube on the other side. It also raises the question about route of embryo migration despite surgical salpingectomy on the ipsilateral side in this case.
**FC43.08**

**Dydrogesterone in threatened abortion**

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Objective: The aim of this study is to determine if the use of dydrogesterone can improve the pregnancy outcome in cases with threatened abortion during the first trimester of pregnancy. Material and methods: We included pregnant women presenting with vaginal bleeding during the first trimester of pregnancy, from January 1, 2010 until January 1, 2011. Women were randomized to receive either dydrogesterone 10 mg twice a day or conservative therapy, for at list one week or until they had 48 hours without bleeding. They were followed until delivery or abortion in UHOG 'Koço Gliozheni'. Results: Pregnant women were randomized to have dydrogesterone (76 patients) or conservative management (70 patients). The treatment was considered successful if the pregnancy continued beyond 24 weeks of gestation. The incidence of abortion resulted significantly lower (p=0.042) in the dydrogesterone group (6.7%) compared with the group who received conservative treatment (14.2%). Conclusion: Dydrogesterone can reduce the incidence of pregnancy loss in threatened abortion during the first trimester in women.

**FC43.09**

**Uses of vaginal misoprostol for management of delayed miscarriage in Misurata Teaching Hospital, Libya**

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Objective: To determine the effect of vaginal Misoprostol in delayed miscarriage cases between 8 & 24 weeks, and time taken from insertion until expulsion of conception products. Method: Prospective study was carried out in 2010, 90 delayed miscarriage cases were hospitalized, divided into 2 groups: A (8-12 weeks) & B (13-24 weeks). Exclusion criteria: previous uterine surgery, intra-amniotic and genital infection or any other unfavorable medical condition. 600 micrograms (3 tablets) were inserted into the posterior fornix of all patients. Time was calculated for both groups. Each patient received after expulsion 2 tablets per rectum to insure good uterine contractions, ultrasound performed to be sure nothing left inside the uterus. Results: 42 (77.7%) from 54 in group A responded well, mean time taken for complete expulsion was 6 hours, all discharged on the same day. The other 12 (22.2%) each received an additional dose of 2 tablets, 9 (16.66%) aborted completely and discharged the following day, the other 3 (5.55%) developed bleeding per vagina and needed D & C, discharged 24 hours later. 23 (63.88%) from 36 in group B showed good response with mean time of 5 hours for complete expulsion and went home on the same day, 7 (19.44%) needed 2 tablets more, the 6 (16.66 %) left refused additional tablets and ended with D & C, all 13 discharged on the following day. No serious effects were recorded. Conclusion: Vaginal misoprostol for termination of delayed miscarriage is safe and reliable alternative to other methods with significant timesaving that may have an important impact on resource consumption.

**FC44.01**

**Celiac disorders and pregnancy outcomes**

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Objectives: Untreated pregnant women with untreated Celiac Disease (CD) have a higher risk of recurrent miscarriages, fetal growth restriction, low birth weight and/or preterm deliveries than controls; pregnancy outcomes in treated CD patients are still disputed. Our objective was to evaluate perinatal outcomes in women with treated CD. Materials and Methods: We conducted a retrospective analysis on 58,744 pregnant women who delivered at the Department of Obstetrics and Gynaecology, University of Torino, Italy, between 2004-2010; among them 87 were women with CD. Results: Celiac pregnant women under gluten-free dietary treatment, compared with non celiac pregnant women, showed a statistically higher incidence of recurrent abortion (6.89% vs 1.22% OR 5.99 CI 95% 2.61-13.78). There was also a higher incidence of preeclampsia (PE) and intrauterine growth restriction (IUGR) in CD patients, but the difference was not
statistically significant (3.4% vs 2.7% and 3.4% vs 2.2% respectively). With regard to preterm birth, an increasing trend was observed in the CD group (11.5% vs 7.6% OR 1.57 CI 95% 0.81-3.04). Conclusions: On the basis of our data, it may be concluded that CD constitute a risk factor for adverse perinatal outcomes, even under correct gluten-free dietary treatment. It is likely that, in these patients, other factors, not influenced by a gluten free diet, may be involved in the pathogenesis of pregnancy complications.

FC44.02
Timing of labour in women with antiphospholipid antibodies under LMWH treatment
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Background: Pregnant women with antiphospholipid syndrome often undergoes labour and delivery under LMWH treatment. Prophylactic doses of LMWH do not increase blood loss at delivery, however if they are not discontinued at least 12 hours in advance, they hamper the use of epidural analgesia during labour, or spinal anaesthesia, if caesarean section is required. On the other hand, withdrawal of LMWH for a longer time further increases the already high risk of vascular thrombosis, particularly in subjects with previous vascular events. Aim: To outline a protocol for the management of labour and delivery in APS women under LMWH treatment. Methods: We suggest elective induction of labour between 37 and 40 completed weeks of gestation. The mode of induction (pre-induction cervical ripening or direct induction of labour) is chosen according to Bishop score. 1) If Bishop score is ≤4 and cervical ripening is required, with the average times to labour and to delivery of 12-13 and 18-22 hrs, respectively, we suggest to administer LMWH at the beginning of cervical ripening. 2) If the Bishop score is ≥4 and the times to labour and to delivery are shorter, we suggest to administer LMWH 12 hours before the induction. Epidural catheter is removed immediately after delivery. LMWH is restored 12 hours after removal of the epidural catheter or spinal anaesthesia. The protocol makes epidural analgesia or spinal anaesthesia possible, with a short time of LMWH withdrawal, then minimizing the risk of thrombosis.

FC44.03
Evaluation of metalloproteinases: MMP-2, MMP-9; their inhibitors: TIMP-1 i TIMP-2; pro-inflammatory cytokines: IL-6, IL-8 and oxidative stress marker: 8-iso-PGF2α, in prediction of preterm delivery
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(3) Institute of Rural Health, Isobolographic Analysis Laboratory, Lublin, Poland

Objective: The aim of this study was to evaluate the relationship between the activity of metalloproteinases MMP-2 and MMP-9, their inhibitors TIMP-1 and TIMP-2 and proinflammatory cytokines: IL-6, IL-8 and the level of 8-iso-prostaglandin PGF2α, in patients with preterm delivery. Methods: The study included two groups of women with preterm labor (the first group consisted of patients with preterm labor with ineffective tocolysis, a second group of women with preterm labor who respond to tocolysis), and the third group of 35 healthy pregnant women below 37 weeks of pregnancy. The level of 8-iso-PGF2α, IL-6, IL-8, MMP-2, MMP-9 and TIMP1 and TIMP2 in the serum of patients was evaluated using an enzyme immunoassay ELISA. Results: Levels of IL-6 and IL-8 in serum of women with preterm labor who did not respond to tocolysis were significantly higher compared to levels found in women who have responded positively to treatment and healthy pregnant women. The concentration of 8-iso-PGF2α in both groups of women with preterm delivery did not differ significantly compared to healthy pregnant women. Similarly, we found no significant difference in the mean concentration of MMP-2 in the serum of the both groups of patients with preterm delivery compared to the control group. Interestingly, in both groups of women with preterm labor, MMP-9 level was higher than in healthy pregnant women. Moreover, the concentration of TIMP-1 in sera of pregnant women with preterm delivery was significantly higher in comparison with the results obtained in the control group. It was also found that in women with preterm labor with ineffective tocolysis, the level of TIMP-1 was higher compared to women with preterm labor symptoms who respond positively. The concentration of TIMP-2 in sera of pregnant women with preterm delivery was significantly higher compared to the control group. In addition, in women with preterm labor who failed tocolysis, the level of
TIMP-2 was significantly higher compared to women with preterm labor with successful tocolysis. Conclusions: Ineffective tocolysis in women with preterm labor may be due to severity of inflammation at the start of therapy, which indicates increased expression of IL-6 and IL-8 in comparison to pregnant women who responded positively to treatment. Stimulation of proteolytic activity of gelatinases components / inhibitors may evidence about an active process leading to shortening and dilating the cervix in preterm labor, and increased activity of inhibitors is a defense mechanism.

FC44.04
Analysis of the mode of pregnancy and childbirth completion in patients after prior Cesarean section
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In Poland as in worldwide, the incidence of cesarean section increases, reaching a value of about 10-20%. For this reason, the number of pregnant women with a prior cesarean section is increased. Prior cesarean section is not an absolute indication for the next one. Birth after cesarean section is possible, but is one of the labors of greater risk of complications. The main reasons for changing mode of delivery in patients initially eligible for vaginal birth are intrauterine fetal asphyxia and the lack of progress of labor. A careful analysis of the indications for prior cesarean delivery and assessment of the current obstetric situation and also positive attitude delivering women to attempt to a natural birth are needed. The aim of this study was to analyze how to complete the pregnancy and childbirth in women after prior cesarean section. We assess also the influence of age; places of residence; education, material and social status of pregnant women and whether social factors may influence their attitude to natural childbirth. In our material, an attempt to vaginal delivery was taken at 63.35 % of patients, of whom 47.27 % deliver vaginally and 44.7 % underwent repeat cesarean section. After careful analysis of present obstetrics situation, at once 46.83 % of pregnant women were classified for the next cesarean section. These studies show that about half percent of pregnant women after cesarean section, scheduled for vaginal birth successfully born vaginally. Birth after cesarean section is possible but requires a carefully supervision and patient willingness to this way of child birth.

FC44.05
Retrospective analysis of teenage pregnancies in Malta
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Objectives: Teenage motherhood has often been reported to be associated with adverse pregnancy outcomes, specifically with low birth weight, small for gestational age infants and prematurity. The objective of the present study is to analyse the sociodemographic data, gestational characteristics and perinatal outcomes of teenage mothers delivering in a country with easily accessible, free of charge maternity care and a population with strong family ties offering family provided psychosocial support. Materials and Methods: All teenage pregnancies delivered in Malta between January 2005 and December 2006 were identified and compared to published national data. For the purpose of our study teenage pregnancy was defined as a pregnancy occurring in mothers aged 13-19 completed years at delivery. Results: A total number of 466 pregnancies occurred in teenage girls, accounting for 6% of all pregnancies. Teenage pregnancies were characterised by lower mean birth weights (31778g vs 3214g; p = 0.048) and Apgar scores at five minutes post-delivery (9.03 vs 9.08; p = 0.001). There was no correlation between birth weight and Apgar score at five minutes for teenage pregnancies, while a statistically significant association was reported for non-teenage pregnancies (p<0.001). Conclusions: These findings are consistent with published data in this regard, suggesting that closer surveillance of teenage pregnancies is warranted to avert perinatal and postnatal complications.
Pulmonary embolism in pregnancy - case report

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Introduction: Venous thromboembolism (VTE) is one of the most common cause of maternal death in developed countries and 10 times more common in pregnant women. Acute VTE should be suspected during pregnancy in women with consistent symptoms and signs, particularly if there are other risk factors for VTE. Treatment should be performed as soon as possible, when the suspicion is strong, even if there is no image to verify the diagnosis. Case report: A 35 year-old pregnant women, 6th gravida, one abortion in the past and 4 living offsprings. She has been diagnosed with venous insufficiency, hypothyroidism and hepatic adenoma. At 26 weeks gestation, was diagnosed thrombophlebitis in the right inferior member and treated with tinzaparin 0.7ml along 12 days. Two weeks later, she was started on symptoms of dyspnea for little efforts and orthopnea, palpitations and dizziness. Echocardiogram showed no anomalies. Due to high clinical suspect of pulmonary thromboembolism have begun treatment with enoxaparin 120mg/day and was forwarded to an immunohemotherapy consultation. Programmed delivery at 40 weeks allowed suspension of enoxaparin 24 hours before induction. Therapeuticwas established at 12th hour after delivery, which enoxaparin, that suspended in the 5th day and warfarin that continued for 6 months. No complications during early puerperal period occurred. Conclusion: We must be aware to risks factors of TVE in pregnancy. In the occurrence of and TVE event, anticoagulation with LMWH had to be established at least until the delivery. 50% of pulmonary thromboembolism is asymptomatic. A high clinical suspicion should be a motive to introduce anticoagulant treatment.

Review of cases of placenta praevia at Aberdeen Maternity Hospital, 2009-2011

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Aim: To assess the characteristics, and review the management of Placenta Praevia at AMH. Method: Retrospective case note analysis of 60 consecutive patients with PP who had a caesarean section (CS), 2009-2011. Results: 68% of women with PP were parous, of whom 41% had at least one previous CS. The praevia was posterior in 66%, and 80% of all PPs were Grade 3 or 4. 83% were diagnosed and graded using transabdominal scan (TAS), 17% required additional transvaginal scan. In 45% the PP was first noted during mid trimester routine anomaly scan, in 30% on investigation for vaginal bleeding. 60% had admissions to hospital, most due to bleeding, the rest to await delivery for geographical and social reasons. Only 1 patient needed antepartum blood transfusion. 53% received prophylactic steroids for fetal lung maturity. 77% had their CS at >36 weeks, and 33% <36 weeks due to vaginal bleeding. In >80% consultant anaesthetist and obstetrician were present at CS. 80% were performed under spinal anaesthesia, 3% were converted from spinal to GA. The cell saver was used in 63%. Only 25% had blood loss > 1 litre and 8% had blood transfusion. 59 % had Hb>10g/L at discharge. Conclusion: PPs at AMH were managed mostly in keeping with suggested guidelines (RCOG). Most PPs were diagnosed with TAS. Most achieved gestation of >36 weeks at delivery. The presence of senior anaesthetic and obstetric staff during C/S could be improved. Most CS’s were done under regional anaesthetic, and with the cell saver increasingly being used.

Hysteroscopic resection of a uterine septum under the laparoscopic control

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Introduction. Müllерian duct anomalies result from nondevelopment or varying degrees of nonfusion of müllerian ducts. These occur in 1% to 15% of women. A septate uterus is the most common congenital
uterine malformation associated with recurrent reproductive failure and obstetric complications. Material & methods. The appearance of septate uterus and bicornuate uterus are extremely similar on hysterosalpingogram, and the distinction must be made by demonstrating a normal external fundal contour with a uterine septum as opposed to the presence of two uterine horns in a bicornuate uterus. The uterine septum may be thin or broad and may varied in length, from an exaggerated arcuate appearance to total division of uterine corpus, possibly including the cervix. Results. In a case of total division of uterine corpus, possibly including the cervix, the uterine perforation may occur. To avoid this complication, we perform concurrent laparoscopy to both visualise the normal fundal contour before dividing the septum as well as to guide the direction and extent of the dissection hysteroscopically. Conclusions. Indications for hysteroscopic resection of a uterine septum include repeated first- or second- trimester losses, a history of premature labor and delivery, and possibly concurrent infertility. Normal reproductive outcome following the division of a uterine septum is reported to be between 70% and 85% term delivery rate in patients with prior recurrent spontaneous abortions. The safest way to avoid uterine perforations during the hysteroscopic septum resection is using the laparoscopic approach.

Keywords: septate uterus, hysteroscopic resection, laparoscopy

FC45.02
Twenty four hours urinary Prolactin (24UP) is the best marker to differentiate normal from micro/macroadenoma: prolactinoma is a natural family planning not a disease entity
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Objective: To define the clinical significance of Prolactinoma and find more reliable laboratory markers we tried to use the 24 hours urinary Prolactin. Materials and Methods: Seventy four normal volunteers were compared with 12 hyperprolactinemia of unknown significance (HPUS) and 38 confirmed Prolactinoma for 24UP corrected for volume and Creatinin clearance. Hyperprolactinemia of unknown significance and confirmed Prolactinoma were defined as elevated blood Prolactin level with 0-1 and all three criteria of amenorrhea, galactorrhea and headache respectively. Blood and urine samples were evaluated with highly sensitive ICT. Prolactinoma was evaluated with dynamic MRI of the sella turcica. Results: The mean and range of 24UP (as such and corrected) were completely different among the three groups with 11-17, 14-38 and 26-49 microgram/d respectively. 24UP could differentiate macro from micro adenoma. This will reduce the need for MRI by 90%. Conclusions: 1. 24UP is the best marker for differentiating spurious hyperprolactinemia from prolactinoma. 2. It can differentiate micro from macro adenoma. 3. It abolishes the need for MRI in most cases. 4. Glomerular filtration and tubular excretion cause extreme aberration in prolactin dynamics so that blood levels do not reflect total prolactin output. 5. Taking the high prevalence of prolactinoma in unselected autopsy series (6-28%) and the spontaneous remission in 90% on follow up of 5-7.5 years we conclude that microadenoma is neither an autonomous tumor growth nor a disease entity but a natural adaptive reaction in terms of a very sophisticated family planning and contraception system of the nature.

FC45.03
The screening breast cancer and finding mammography in women’s
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Introduction: Breast cancer is a malignant proliferation of epithelial cells lining the ducts or lobules of the breast and according for about one – third of all cancer in women. Asian women have one- fifth to one – tenth the risk of breast cancer of women in North America. Routine use of screening mammography in women age 50 years. Methods: This study was cross- sectional descriptive. The statistical population included all of the women’s referred to towhid hospital. Mammography and X-Ray were obtained . Data was collected by questionnaire and positive diagnosis was based on standard definition of the disease with survey of the mammography, X-Ray and physical examination. Results: The mammography was done on 759 women, the results of this showed that age of 40/44% of samples was between 41-50 . Breast pain was the most common chief complain (39/78% . 72/2 % don’t have history of breast disease . 89/72% don’t have
family history of breast disease. Survey of the graphy showed 67/85% done have any west agea and 23/18% had high density 4/21% benign tumor 0/39% malignant tumore 1/44% mastitis 1/05% cyst 1/05% fibro adenoma. Conclusion: The results of this study demonstrate the need to consider the women education and implementing screening programs. Because the breast are a common site of potentially fatal malignancy in women and because they frequently provide clues to undergoing systemic diseases in both men and women examination of the breast is an essential part of the physical examination.

FC45.04
Questionnaire on Sexual Attitude and Function 2009: a novel clinical and epidemiological computer based tool
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Objective: To study sexual problems of our patients and standardizing it for patients with or without religious and cultural restrains we developed a questionnaire with 240 phrases that were extracted from a pool of 1400 sentences addressing sexual problems. Sixty four scales under four headings (sexual general characteristics, deviations, dysfunctions and psychodynamic syndromes) (16 items each) were evaluated based on criteria of DSM-IV and ICD 10. Five validity scales (honesty, desirability, debasement, guilt feeling and overall validity) were also used for better assessment. Methods: A total of 1300 patients in the four variants of the test were evaluated during a time span of 7 years. The questions were presented to examinees at 8th. Grade and higher in a calm environment and the results were evaluated by a computer software specifically developed for this purpose. Results: The last version of the test was completed by 734 patients with excellent compliance. It was of nice politeness and comprehensiveness. For almost all scales the sensitivity and specificity were around 85 and 92% respectively. Conclusion: We conclude that QSAF 2009 is an excellent tool both in clinics (diagnosis and follow up) and epidemiology with high sensitivity and specificity. It has also application in cross cultural studies, medico – legal issues and medical documentation. It prevents face to face interviews, breaks patients' resistance and is less time consuming than scheduled interviews.

Keyword: Sexual Assessment, Deviation, Dysfunction

FC45.05
Sexual activity during and after pregnancy in Gorganian women, Iran
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Introduction and Objective: In pregnancy, couples take some changing in their relationship, especially in sexual relationship. This study was aiming to looking into the sexual activity during and after pregnancy from the view of married working women of Gorgan - Iran. Material and Method: Descriptive study was done on 129 married women. Researcher made questionnaire included two parts: a) demographic information, b) specific questions. Analyzing was done by descriptive statistics. Results: The average age of samples was 37.5 and length of their marriage was 13.6 years. 70.5% had intercourse during pregnancy less than before pregnancy. The reason for this was fear of danger to the fetus. And 6.2% of them had more intercourse than before, because of the changes of hormones, sexual need increases during this period. 36.4% stopped intercourse in the last month. 6.2% said the whole period of pregnancy they did not have. Also, related to earlier time of restarting of doing intercourse after delivery, majority of them said 1-3 months (53.5%) after the end of pregnancy. Most of them claimed that the first intercourse after pregnancy was done by the request of their husbands (67.4%).While 30.2% said that it was mutual. Conclusion: Results of this study show that fear of harm to the fetus was the most important factor for this decrease. Therefore, we can help the couples with correct education how they can have sexual activity during this time, so that they could have a comfortable and improved quality of sexual relationship and a sustained marital life.

FC45.06
Psychological stress causes relative infertility through direct change in the frequency pattern of GnRH release from the hypothalamus
Objectives: Evaluation of oscillation pattern of GnRH release by the hypothalamus in different mental states. Materials and Methods: Twenty two patients were evaluated by a computer algorithm to find oscillation of LH/GnRH pulsation measured on four sessions (day 6 and 14) every 10 minutes within two consecutive cycles in addition to the MCMI-III and Hamilton test. Results: The pattern of oscillation was indirectly correlated with Hamilton scale and the anxiety state and showed statistically significant lowering of frequency during anxiety and depression states. Besides, the slope of GnRH between two consecutive sessions (d0GnRH0/GnRH1dt) showed also a prominent reduction and even flattening. In addition the time to ovulation was also postponed in cycles with prominent anxiety.

Conclusions: 1. Psychological stress exerts its effect through a reduction of pulsation frequency in GnRH release. 2. Pattern of GnRH pulsation changes in the range of ¼ to 1/15 of the baseline and external stimuli have strength of changing hormonal milieu in this range. 3. MCMI-III is an excellent tool for evaluating psychological state of the patient. 4. Patients with borderline, schizoid, dependent, depressed and passive aggressive personality suffer most from irregularity of menstruation cycles. 5. Patients with chronic major depression are subject to menstrual irregularity highest during stabilization of disease and in the early phases of recovery after treatment with SSRI. 6. Treatment of depression/anxiety causes a reduction of menstrual cycles length. 7. Measurement of GnRH, FSH, LH and Estradiol on two sessions one week apart is a nice marker for regularity and ovulation.
FREE COMMUNICATION POSTER ABSTRACTS

P01.01
Endometrial changes in postmenopausal breast cancer patients receiving tamoxifen – a 6 year retrospective study
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Tamoxifen is widely used in the management of breast carcinoma. Previous studies have suggested an increased prevalence of endometrial changes after treatment with tamoxifen. Objective: This study was performed to evaluate the pathologic endometrial changes described in association with postmenopausal tamoxifen treatment and to correlate with symptoms and sonographic characteristics. Materials and Methods: A 6 year retrospective study of postmenopausal women with breast cancer treated with tamoxifen was done (n=137). We analysed the histologic findings and correlated them with symptoms and sonographic appearance of the endometrium, reviewing the pelvic sonograms and medical histories. Results: Ninety-nine (72%) of the histologic findings showed endometrial polyps, twenty-one with normal endometrium, three endometrial cancers, among others less relevant. Postmenopausal bleeding prompted thirteen studies, nine revealed abnormal endometrial thickness. In the group of asymptomatic women, seventy-three had endometrial thickness. The women receiving tamoxifen for less than five years had less abnormal histological findings than women receiving tamoxifen for 5 years or longer, and the three endometrial cancers occurred in the latter group. Conclusions: The results provide evidence for an estrogenic effect of tamoxifen treatment on the postmenopausal uterus and show that it is associated with an increased occurrence of polyps, which agrees with previous studies. The majority of women being treated with tamoxifen and endometrial changes were asymptomatic. We found no difference in endometrial sonographic appearance of patients who had bleeding versus those who had no bleeding. The duration of tamoxifen treatment was correlated with the abnormal histological findings.

P01.02
Office hysteroscopy in postmenopausal women
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Objective: to evaluate office hysteroscopy as a screening test for endometrial abnormalities in postmenopausal women. Materials and methods: We selected 970 women (range 39-80 years), who have had their last menstruation at least one year before. They performed a transvaginal scan (TVS) and subsequently hysteroscopy with eye-guided biopsy. Hysteroscopy was realized in an office setting, without analgesia or anaesthesia. Patients were divided into 2 groups: the group 1 included patients with an endometrial thickness > 4 mm, the group 2 included patients with endometrial thickness < 4 mm, evaluated with TVS. We calculated sensitivity, specificity, positive predictive value (PPV), negative predictive value (NPV) of the hysteroscopic evaluation in each group. Results: Group 1 included 350 women, and group 2 included 620 women. In the first cluster we observed with hysteroscopy an endometrial abnormality in 129 patients (36.8%). Comparison in this group of the diagnostic value of hysteroscopy and histology in detecting endometrial abnormalities yielded 99% sensitivity, 99% specificity, 98% PPV, 100% NPV for hysteroscopy. In the second group, hysteroscopy revealed an endometrial abnormality in 120 patients (19.35%). In this cluster, comparison of the diagnostic value of hysteroscopy with histology for detecting endometrial abnormalities yielded 100% sensitivity, 100% specificity, 100% PPV, 99% NPV for hysteroscopy. Conclusions: We believe that postmenopausal women, even if asymptomatic, should perform eye guided hysteroscopic biopsy. However, hysteroscopy could be considered as a screening test only if it is performed in an office setting, without analgesia or anaesthesia.
Huge ovarian cyst torsion
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Adnexal torsion is one of the most common surgical gynecological emergency and requires prompt diagnosis and treatment. We wish to introduce a case of adnexal torsion measuring over 25 cm in diameter. A 42-year-old woman, gravid 0, para 0, was admitted to the emergency department with complaint of severe abdominal pain for 3 days. The patient denied any prior abdominal operation, her past medical history was unremarkable. She had a history of abdominal massage 2 weeks ago because of abdominal pain. Physical examination revealed a palpable lower abdominal mass protruding from the subumbilical to suprapubic area. CA-125 level was 24.90 U/mL. Computed tomography of the abdomen was performed and revealed a large cystic mass and whirling of the adnexa (Figure 1). We performed emergent exploratory laparotomy. The examination of the pelvis showed a huge right ovarian cyst with torsion (Figure 2). It measured 27x25x20 cm. A right salpingo-oophorectomy was done. The patient was discharged four days later without any complication. Pathologic examination of the ovary and fallopian tube showed marked hemorrhage, congestion, and necrosis. Adnexal torsion usually occurs during reproductive age. However, huge ovarian cyst torsion measuring 20 cm in diameter was rare and the mechanism of torsion was unknown. We thought that adnexal tumor with partial torsion previously grows rapidly or abdominal massage 2 weeks ago, but these are only a hypothesis. We reported a rare case of huge ovarian cyst torsion with unknown mechanism.

Clinical presentation and operative findings of intraabdominal anatomical variations in Mayer-Rokitansky-Kuster-Hauser syndrome
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Objective: To analyse the clinical presentation and operative findings of intraabdominal anatomical variations in Mayer-Rokitansky-Kuster-Hauser syndrome (MRKHS). Materials and Methods: A retrospective database of patients operated for MRKHS in our hospital was maintained in period 1986 to 2011. Results: Our study includes 33 women with MRKHS. The mean age at surgery was 22.5±3.2 years. All patients had normal external genitalia and the 46, XX, chromosome pattern. Menarche was absence in all patients. Main reason for referral willingness was to start sexual life (n=22, 67%). 5 (15%) of patients had insufficient and/or painful sexual intercourse. The total absence of vaginal sinus was found in 7 cases (21%). In 5 cases (15%) normal uterus (3-5 cm) but no cervix and in 24 cases (73%) total absence of uterus was found during surgical exploration. Both horns were present in 2 cases (6%), in 1 case (3%) there was only 1 uterine horn and in 1 case (3%) 2 rudimental uterus were found. Normal bilateral ovary were presented in 32 cases (97%) with normal bilateral tubes in 12 cases (36%) and unilateral ovary was found in 1 case (3%). 2 renal variations were identified: in 1 case (3%) bilateral normotopic double renis and in 1 case ectopic renis were presented in minor pelvis. Conclusions: primary amenorrhea and sexual dysfunction were the main symptoms of MRKHS. The failure of the development of intraabdominal extragenital organs in association with MRKHS were rare in our settings data.

Women’s self-satisfaction, sexual life and fears during pregnancy
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Objectives: to evaluate self-satisfaction, sexual life and fears of Lithuanian women during pregnancy. Materials and methods: 232 questionnaires were given for pregnant women attending lectures for mothers-to-be. The study was carried out November – December 2011. Collected data was analysed with SPSS
program v.17.0. Results: The study group: 188 (81%) women were primipara, 44 (19%) – multipara, pregnancy week was 33±4.3, women age was 28±3.4 years. 13 (57%) multipara had complications during earlier deliveries. 194 (83%) women had no complications during this pregnancy. 137 (59%) studied women were frightened of newborn’s health (78%), delivery pain (55%), genital tract ruptura (40%). Women with complications in prior deliveries were afraid more (p<0.05). 180 (78%) women were satisfied with their looks. 190 (82%) women led a sexual life during pregnancy. 40% of them had frequent sexual intercourse. 42 (18%) women didn’t have a sexual life during pregnancy because of fear for fetus health 24 (57%), decreased libido 11 (26%). Sexual life quality deteriorated during pregnancy by 1.5 point (p=0.001). Women leading a sexual life during pregnancy rated it better (p=0.001) while those who had frequent sexual intercourse rated it worse (p<0.05). 69% of interviewees claimed that lectures decreased their fears about delivery. Conclusions: Lithuanian women feel satisfied with their looks during pregnancy. Unbiased fears negatively effect pregnant women’s sexual life. As lectures minimise women’s fears it would be advisable to start attending them earlier.

P02.04
Cervical ectopic gestation - a case report
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Cervical pregnancy is a rare life-threatening form of ectopic pregnancy. It accounts for less than 1% of all extra uterine gestations. Aetiology is unknown, however risk factors include: IUS use, In Vitro fertilisation-Embryo transfer and cervico-uterine instrumentation. A 32yr old par1+0, who had LLETZ treatment for CIN3, presented with painless unprovoked profuse vaginal bleeding at 6 weeks gestation. On examination, she was afebrile, her abdomen was soft and tender, with mild guarding. On speculum examination a distended cervix, profuse bleeding and no tissue was seen. βHCG at presentation was 1059 IU/L and reapeat after 48hrs was 3092 IU/L. Transvaginal ultrasound demonstrated a thickened endometrium, empty uterine cavity, an irregularly shaped gestational sac with fetal pole, pulsation in the upper endocervical canal and hour-glass shaped uterus. She was admitted for observation, 2 size 16G wide bore canular were inserted and she had misoprostol 600mg PR 4hrly. At EUA careful estimation of the uterine cavity length was approximately eight centimetres while the curetted material was obtained at 4cm. Higher curetteage revealed minimal debris from the uterine cavity. She had an uneventful ERPC after 3 doses of misoprostol. βHCG post ERPC was 753 iu/l, she was discharged home after 24hours of observation. Repeat βHCG 2weeks later was 12 iu/l.

P02.05
Uterine artery embolization for the treatment of uterine fibroids - a clinical case review
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Objective: to report a clinical case of indicated uterine artery embolization for treatment of uterine fibroid. Design: case report. Setting: West Tallinn Central Hospital. Methods: A 45-year-old woman complained about heavy menstrual bleeding. The patient was diagnosed with rear wall uterine fibroid that distorted the uterine cavity. The patient was also diagnosed with hypertension, chronic anaemia and recent hospitalization with pulmonary embolism. After what she was on constant anticoagulation medication (Marevan) and heavy bleedings started to interfere with everyday life. In this case the risk for open surgery was too high because of patient’s recent pulmonary embolism, obesity (BMI 43.1), hypertension, anticoagulation treatment, duration of the operation and possible long demobilisation. Therefore uterine artery embolization for the treatment of uterine fibroid was indicated. The uterine artery embolization was done in a slight analgesia and hydrocoils and plastic particles were used. The patient recieved 24 hours of patient controlled analgesia with morphine for ischemic pain reaction. The procedure was done without complications. Results: In 11 months the size of the uterus reduced 44% and the size of the fibroid 51%. Patient’s menstrual cycle returned in 8 months, without heavy bleeding. Conclusion: The method of uterine artery embolization for the treatment of fibroids should be considered and used more often in Estonia since it is a necessary alternative to operation and the developement of invasive radiology has made it possible.
Predictive factors of survival in uterine carcinosarcoma

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Objectives: Uterine carcinosarcoma (CS), also known as malignant mixed mullerian tumor, is one of the most aggressive types of uterine cancer. The purpose of this study was to determine the prognostic value of preoperative serum tumor markers, various clinicohistological factors and treatment modalities in the survival of these patients. Materials and Methods: We conducted a retrospective review of uterine sarcoma patients, from January 2000 to December 2007. Demographic characteristics such as age, body mass index, parity, smoking, preoperative serum tumor markers (CA-125, CEA, CA 19-9 and CA 15-3), pathological features including stage, grade, myometrial invasion, lymphovascular involvement, epithelial components histological type were collected. Treatment modalities such as type of surgery and administration or not of adjuvant therapy were also recorded. A multivariate Cox proportional-hazard model in a stepwise method analysis was performed in order to determine the independent predictors for prolonged survival. Kaplan-Meier survival estimates for events were graphed over the follow-up period. Results: A total of 37 patients with mean age 68.1 years (SD=10.7 years), participated in the study. The mean follow-up period was 3.5 years (SD = 3.0, range 0.3-12.5 years). Twenty two patients died (62.2%) from disease and one patient (2.7%) died from other causes. When multiple Cox regression analysis with stepwise approach was implied indicated stage as the only significant factor for the outcome. The cumulative event-free rates for one, two and five years were 91% (SE=6%), 78% (SE=9%) and 60% (SE=10%) for cases staged from IA to IIB and 36% (SE=13%), 21% (SE=11%) and 14% (SE=9%) for cases staged from IIIA to IV, respectively. Conclusions: In this retrospective study none of the preoperative serum tumor markers, neither epithelial components histological type nor grade showed a significant association with prognosis. Despite advances in treatment adjuvant therapies had also no effect in patients overall survival. Our results confirm that early stage of the disease at diagnosis is the only independent prognostic factor for prolonged survival.

Vaginal myomectomy: a case report

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Introduction: Myomectomy is the best treatment option for symptomatic women with uterine fibroids who wish to maintain their fertility. This surgical procedure is classically performed through abdominal route (laparotomic or laparoscopic). Recently, vaginal myomectomy has been evaluated for clinical effectiveness and safety on the excision of uterine fibroids, in selected cases. Compared with laparotomy it has the advantages of no skin incisions, shorter hospital stay, less postoperative pain, rapid recovery, among others. Feasibility seems to be acceptable, although some authors refer increased risk of pelvic infection in the postoperative period. Case Report: A 38-year-old female, Gesta III Para II, was admitted complaining of pelvic pain and dyspareunia. On pelvic examination she presented a 7cm long vaginal mass, extending from the anterior cervix labia to the vaginal hymen, distending the vaginal walls. Ultrasound exploration revealed a subserosal myoma from the anterior portion of the isthmic/cervix region of the uterus. In order to maintain fertility and given the good vaginal uterine fibroid accessibility, a vaginal myomectomy was performed through anterior colpotomy. Suturing was made in 2 layers using a 0 absorbable suture. She was placed on prophylactic antibiotics. No peri/postoperative complications were observed. She was discharged at day 3. One month postoperative pelvic evaluation revealed a great recovery. Discussion: A vaginal surgical approach may be considered an alternative to laparotomy or laparoscopy to treat accessible myomas. It seems to be a simple, feasible and reproducible surgical procedure, with low morbidity and a good short-term success rate.
**P02.08**

**Imperforate hymen - a rare cause of lower back pain and bilateral pelvic masses: a case report**

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Introduction: Imperforate hymen, with an incidence of 0.1-0.05% at birth, is the most common congenital cause of genital outflow obstruction in females. This abnormality may not be detected until the onset of menses, when hematocolpos causes symptoms due to expanding pelvic mass. Recurrent abdominal and back pain is the most common symptom, associated with primary amenorrhea and urinary retention. Case Report: A 13-year-old girl was admitted because of lower back pain and bowel constipation for several days. She had not attained menarche. There was no history of cyclic abdominal pain or urinary retention. The patient's secondary sexual characteristics were present. Physical examination revealed a distended abdomen, lower abdominal tenderness and hypogastric/pelvic mass. On pelvic examination, the hymen was found to be imperforate and was bulging forwards. On rectal exam, a large mass was felt anteriorly. Abdominal ultrasound revealed a dilated vagina, suggestive of hematocolpos (>137mm x 90mm x 84mm); a dilated uterus, suggestive of hematometra (47mm x 29mm) and bilateral pelvic cystic masses (right- 53mm x 41mm; left- 66mm x 40mm). The patient was taken to the operating room and a cruciate incision was made over the hymen under general anesthesia. Around 850ml of dark, red, tarry blood was drained. Post-operative period was uneventful. Discussion: Imperforate hymen is a rare diagnosis, but should be considered when dealing with premenarcheal adolescent girls with back pain and pelvic masses.

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**P03.01**

**Successful conservative management of postpartum aortic dissection in a patient with Turner’s syndrome after oocyte donation**

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Objective: Women with Turner’s syndrome (TS) have a 2% or higher increased risk for aortic dissection or rupture during pregnancy. The risk of death during pregnancy is increased as much as 100-fold. We report the first case of a woman with TS who had an aortic dissection postpartum; she was treated conservatively and had a complete recovery. Case report: A 28 year old woman with TS and well controlled hypothyroidism had a normal echocardiographic examination and magnetic resonance imaging of the heart and the aorta before she became pregnant after oocyte donation. At 35 weeks of gestation she was treated for pre-eclampsia. A new echocardiographic examination was normal. The delivery process was initiated at 37 weeks. An emergency caesarean section was performed because of no progress. She had no hypertensive therapy at discharge. At the follow-up visit, 15 days postpartum, she complained of constant retrosternal pain and dyspnoea over a 2-day period. Elevated blood pressure and tachycardia were noted. An acute Computer Tomography-scan confirmed a type-II aortic dissection in aorta descendens just bellow the right subclavian artery, extended to the level of the truncus coeliacus. Acute cardiothoracic consultation suggested hypertensive treatment with calcium-antagonist, beta-blockers and angiotensin-convertting enzyme inhibitors. No surgical intervention was needed. She had a successful recovery and is still under carefull follow-up. Conclusion: Careful cardiac screening, close follow-up and management of any possible complications are necessary in patients with TS before, during and after pregnancy. Aortic dissection postpartum can be managed successfully with conservative hypertensive treatment.

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**P03.02**

**The results of external cephalic versions in Tartu University Women´s Clinic**

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Objectives: to evaluate the factors associated with the success rate of external cephalic version (ECV) for breech presentation, the safety of ECV. Materials and methods: a retrospective study of all ECV in Tartu University Women’s Clinic during last 5 years (2007-2011). The total number of ECV was 305. Results: the overall success rate during 2007-2011 was 42% varying from 35% (2007) to 50% (2010). Most (35%) of the ECV were performed at 36 weeks of gestation and the success rate was 42%; 27,5 % were performed at 35
weeks with the success rate of 39% and 22.3% were performed at 37 weeks, success rate 38%. Most of the 
fetuses (64%) were in Frank breech presentation. ECV was the most successful in case of footling breech 
presentation – success rate 100%; oblique presentation – 60%; transverse presentation – 56%; complete 
breech presentation – 43%; Frank breech presentation – 38%. The estimated weight of the fetus by 
ultrasound was mostly (47.9%) between 2501-3000g and the ECV succeeded in 38% with this predicted 
fetal weight. ECV was successful 58% in multipara and 30% in nullipara. ECV was successful 34% with 
anterior placenta and 49% with posterior placenta. During this 5 year period there were 3 cases when after 
ECV there were mild reversible changes in the cardiotocogram. There were no complications related to 
performed ECV. Conclusions: in Tartu University Women´s Clinic ECV have been successful and without 
complications. The overall success rate was 42%. ECV have reduced the rate of caesarean sections due to 
breech presentation.

P03.03
Rupture of a noncommunicating rudimentary uterine horn pregnancy at the 28th week of gestation: a 
case report
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Background: Pregnancy of a noncommunicating rudimentary horn of a unicornuate uterus is extremely rare 
form of ectopic pregnancy. In such cases, pregnancy is possible due to a phenomenon of transperitoneal 
migration of either sperm or fertilized ovum. The diagnosis is difficult and often delayed. Rupture usually 
occurs during II trimester of pregnancy. Case: We report a case of a 29-year-old multiparous patient with 
rudimentary horn pregnancy diagnosed at gestational week 27+3 and rupture of a non-communicating horn 
two days later one hour prior to cesarian section. Intra-operatively, a premature male baby with Apgar score 
1-4-5 and extremely low birth weight (550 g) was delivered from a rudimentary horn of a unicornuate 
uterus. The rudimentary horn was on the right side of the uterus, no connection between them was noted. 
Rudimentary horn excision and ipsilateral salpingectomy were performed. Mother was in good condition 
after the surgery. The baby was taken to intensive care unit and died three months later due to 
decompensated pulmocardiac insufficiency. Conclusion: In cases of rudimentary uterine horn pregnancies 
the accurate diagnosis is exceedingly important and immediate removal a lifesaving procedure. Neonatal 
morbidity is high because most cases of fetal salvage have been emergent laparotomies after uterine rupture 
at premature gestational ages.

P03.04
Acute appendicitis during a 2nd trimester pregnancy. A case report
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Objective: Acute appendicitis in pregnancy is the most common cause of non-traumatic acute abdomen in 
pregnancy and represents a diagnostic challenge. Delay in its diagnosis and management can cause adverse 
outcome in both mother and fetus. Material and methods: A 23-year old Caucasian woman G1P0 was 
reported to our hospital at 21 weeks of pregnancy with a persistent right lower quadrant abdominal pain, 
nausea and vomiting. Fetal vitality was confirmed. On admission to our Department, she was apyrexial, the 
white blood cell count (WBC) was at 15000/ìl with 86% neutrophils. On physical examination she had a 
mild to moderate tenderness of the right abdominal wall. The differential diagnosis included acute 
appendicitis, gastroenteritis and stomach perforation. The abdominal x-ray and ultrasound scan revealed 
evidences suggesting high suspicion of appendicitis. We administered clindamycin 300 mg I.V. t.d.s.8 
hours later the WBC was at 19500/ìl with 95% neutrophils and the CRP level was increased to 10.8mg/dl. 
Results: She urgently underwent an open appendectomy. Her postoperative condition was uneventfull. Vitality of the fetus reconfirmed and she was discharged in 4 days. 7 days later she was 
readmitted to our Department, with intermittent mild lower abdominal pain, positive fetal heart activity and 
advanced cervical dilatation of 5 cm, which finally resulted to a missed pregnancy at 22 weeks with a non 
vital fetus weighting 370 grams. Conclusion: Acute appendicitis during pregnancy should be diagnosed on
time. Furthermore, delaying intervention increases the risk of adverse fetal-maternal outcome leading to miscarriage or preterm labor or septic conditions.

P03.05
Cervical varices as a cause of vaginal bleeding during IVF pregnancy: case report

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Objective: To describe cervical varices as a cause of massive bleeding during late pregnancy. Methods: A case report of a patient with IVF pregnancy and vaginal bleeding. The diagnosis was based on colposcopy and was confirmed by MRI. Results: The patient was hospitalised due to vaginal bleeding at 27w of gestation. Transvagal ultrasonography showed no evidence of placenta praevia. From 29w of gestation the patient remained asymptomatic and was discharged from hospital but wasrehospitalised at 30w due to vaginal bleeding. Cervical varices were diagnosed at 32w of gestation by colposcopy and MRI. Haemorrhagia restarted at 32w of gestation and did not stop despite of vaginal packing. Caesarean section was performed to avoid massive blood loss. During the operation haemorrhage from multiple varices in the lower uterine segment started and the caesarean section was complicated with blood loss and uterine atony, indicating hysterectomy. A male infant weighing 2,228g was delivered with Apgar scores of 7 and 8 at 1 and 5 minutes, respectively. The patient recovered well. Conclusion: Performing only transvaginal sonography during pregnancy may not reveal the reason of bleeding. MRI and colposcopy are recommended if there is more than one episode of unclear bleeding. Patients undergoing IVF may have a higher risk for intraabdominal bleeding from venous plexus in the third trimester of pregnancy. The management of cervical vascular malformations should be considered as a part of differential diagnosis of vaginal bleeding during pregnancy.

P03.06
Maternal knowledge about perinatal group B streptococcal infection in Kaunas region, Lithuania

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Objective: To examine maternal knowledge about perinatal group B streptococcus (GBS), the source of information and some factors affecting their knowledge. Materials and methods: All pregnant women who were treated or gave birth at four hospitals in Kaunas region between March 1 and May 31, 2011 were invited to participate in the study. Study participants (n=874) were interviewed using an anonymous questionnaire to determine their knowledge about perinatal GBS infection and to obtain information regarding demographic status and obstetrical history. Results: Overall, 511 (58.5%) women have heard about GBS. Women who gave birth were more knowledgeable about this bacteria than pregnant study participants, respectively 71.5% and 51% (p<0.001). The source of information was as follows: obstetrician gynaecologist (60.7%), the internet (31.1%), a friend (14.1%) and a book (11.7%). Women at the age of 20 – 24 years (OR 2.9, 95% CI 1.1-7.5) and 25-29 years (OR 3.2, 95% CI 1.2-8.3), with a high school education (OR 2.5, 95% CI 1.9-3.5), urban resident (OR 1.4, 95% CI 1.1-2.0) or parous (OR 2.1, 95% CI 1.5-3.0) had higher knowledge about perinatal GBS infection than other women. Overall, 353 (69.1%) women who have heard about GBS and 716 (81.9%) of study participants did not have sufficient information about this bacteria. Conclusions: Slightly more than half of women had heard about GBS, but two thirds of them did not have sufficient information. Women’s knowledge depends on age, education, residence place and obstetrical history. There is a need to raise awareness of perinatal GBS infection.
P03.07 Reproductive health indicators of Estonian adult women born between 1919 - 1993 according to the data collected by the Estonian Genome Center (EGC)
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Objective: The aim of this study was to describe main reproductive health indicators of Estonian and non-Estonian adult female gene donors born between 1919-1993. Materials and Methods: The data were collected between 2007-2011 from 26 271 women using the EGC Questionnaire. Respondents were divided into 15 five-year birth cohorts, analyzing data regarding Estonians and non-Estonians separately. Data on average age of menarche and first pregnancy, mean number of pregnancies per woman, the proportion of women <20 and >35 years of age at first birth, the proportion of births, induced abortions, spontaneous abortions and ectopic pregnancies was analyzed. Results: In agreement with other studies, nowadays, the average age of Estonian girls at menarche is 1.27 years earlier for birth cohort 1989-1993 than for birth cohort 1919-1923. Similarly, the age at first pregnancy has decreased by 4.39 years for Estonians and by 2.96 years for non-Estonians. Across birth cohorts 1919-1963, the percentage of women <20 years of age at first birth has risen constantly while less women had their first birth being >35. The mean number of pregnancies has remained the same across generations. The proportion of births has declined, that of induced abortions risen (has been high across generations, being higher among non-Estonians) and that of spontaneous abortions remained the same. Ectopic pregnancies were more frequent across birth cohorts 1959-1978. Conclusion: EGC constitutes a big and diverse source allowing us to analyze trustworthy data regarding reproductive health of Estonian women across generations almost over a hundred-year period.

P04.01 Association between obesity, metabolic risks and serum osteocalcin level in postmenopausal women
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Background. Osteocalcin, a marker of bone formation, is also known as a regulator of glucose and fat mass. The purpose of this study was to determine the association between obesity, metabolic risks and serum osteocalcin in postmenopausal women. Methods. We selected 214 postmenopausal women and determined serum osteocalcin, fasting plasma glucose (FPG), fasting insulin, high-sensitivity C-reactive protein (hs-CRP), the homeostasis model assessment of insulin resistance (HOMA-IR), lipid profile, and anthropometric values (body mass index [BMI], waist-to-hip ratio (WHR), body fat, and visceral fat area [VFA]). Results. After adjustment for age and years since menopause, WHR and VFA were negatively correlated with serum osteocalcin, but BMI did not show a significant correlation. Serum osteocalcin was negatively correlated with fasting insulin and HOMA-IR, but FPG, lipid profile, and blood pressure did not show a significant correlation. Based on multiple regression analysis, age and HOMA-IR were the most important predictors of osteocalcin. Conclusion. Our study showed that serum osteocalcin has some significance as an indicator of metabolic risk, including abdominal obesity and insulin resistance. Bone as well as adipose tissue may be an active organ that regulates energy metabolism. A larger study will be needed to clarify the potential of osteocalcin as an indicator of cardiovascular disease.

P04.02 Premature ovarian failure: a case report
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Objectives: Premature ovarian failure (POF) is characterized by amenorrhea for more than 12 months in women under 40 years and biochemical findings showing an association of hypergonadotropism and hypoestrogenism. This syndrome is related with female infertility and its etiology is still unknown in most of the situations. Possible causes are classified in two main groups: genetic disorders and others such as autoimmune diseases. We present a case of a young where multiple factors could be responsible for POF.
Materials and Methods: case report. Results: 28-year-old nullipara woman with Behcet's disease and lactose intolerance, normal pubertal development and irregular menstrual cycles from 13 until 17 years of age, when she started combined pill for contraception. After stopping contraceptives, ten years later, she experienced secondary amenorrhea and complains of vasomotor symptoms. The laboratory blood sample showed elevated gonadotropins and low estrogen levels and the karyotype revealed a mosaicism 45.X/46,XX. A TVUS diagnosed a bicornuate uterus and ovaries had no follicles. She was treated with hormone replacement therapy and sent to a specialized unit of infertility. Conclusions: We found a conjugation of a Turner mosaicism and an autoimmune disease, both that can lead to a depletion of follicles with a disruption of normal ovarian function. The first step of treatment had the purpose to restore the hormonal levels of estrogen and progesterone. Immune modulation therapy given empirically showed in some series good results in promoting ovulation. These young patients need also psychosocial support that helps them to face this devastating condition.

P04.03
Changes of nitric oxide concentration in cultured human endometrium by Phytoestrogen
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Objectives: Angiogenesis is related with many obstetrical and gynecologic diseases such as recurrent abortion, intrauterine growth restriction, endometriosis and adenomyosis. It was regulated by many factors such as nitic oxide, vascular endothelial growth factors, angiopoietins, etc. This study was undertaken to assess the changes of nitric oxide concentration in cultured human endometrial cells by phytoestrogens such as daidzein and equol. Materials and Methods: Endometrial tissues were obtained from hysterectomy specimens which did not have endometrial pathology. Gladular and stromal cells were isolated and cultured separately. 17-β estradiol, daidzein and equol at 10^-4 M were treated on the cultured cells and incubated them for 12, 24, 48 hours. Then cultured media were extracted and centrifuged. Nitric oxide were measured NOx analyzer(ENO-20, Eicom, Kyoto, Japan) Results: There are no changes of nitric oxide concentration which were treated by daidzein and equol Conclusion: Daidzein and equol did not increase nitric oxide concentration in human cultured endometrial endometrial cells.

P04.04
Glucocorticoid inhibition of cell proliferation in the decidualized endometrium
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Synergistic estrogen-progesterone regulation of decidualized endometrial proliferation during pregnancy occurs normally by mating plus blastocyst implantation, or artificially by mechanical vagino-cervical stimulation (vcs) plus uterine trauma during pseudopregnancy (PPG). Dexamethasone (Dexa), a synthetic glucocorticoid, is an established uterine growth inhibitor. Objective: To elucidate whether Dexa growth-inhibitory action involves decidual proliferative mechanisms i.e., 1. the matrix metalloproteinases (MMPs), which promote decidual tissue remodeling by degrading the extracellular matrix; 2. inducible nitric-oxide synthase (iNOS) that catalyzes nitric-oxide which stimulates uterine vasodilation and facilitates decidual substrates availability; and 3. progesterone which regulates decidualization. Material and Methods: Female rats (210-240 g) were subjected to vcs (proestrus and estrus) and bilateral uterine surgical knife-scratch trauma via laparotomy (day 4 PPG). Rats (n = 6/group) were subcutaneously injected with Dexa (1.5 mg/day) for 3 days (1-3, 4-6, 7-9, 10-12 and 13-15). Animals were killed on last injection day for analysis of serum progesterone by RIA, MMP activity by substrate zymography, and iNOS activity by western blot. Results: Comparable time-related inhibition by Dexa was noted for decidual weights and iNOS activity which peaked after PPG days 4-6 and 7-9. Decidual MMP (72 and 92 kDa) activities were maximally reduced following PPG days 4-6 treatment. However, progesterone levels were significantly (p<0.0001), but asynchronously inhibited by Dexa on PPG days 9 and 12 (maximal decidual growth). Conclusions: These data indicate that Dexa-induced decidual growth reductions were associated with decidual
mechanisms (MMPs and iNOS). This inhibition was apparently not mediated by progesterone, suggesting no steroid antagonism (glucocorticoid-progesterone) of endometrial proliferation.

**P05.01**
Granulosa-cell tumor of the ovary: report of 6 cases  
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Objective: to evaluate clinical and ultrasound characteristics, staging, surgical procedures and outcome of ovarian granulosa cell tumors (GCTs). Methods: retrospective descriptive study of 6 patients with GCT. Results: the patients’ age varied from 30 to 69 (mean 48.5) years old. 66.7% of women were in fertile age. Clinical symptoms were irregular vaginal bleeding (33.3%), abdominal distension and pain (33.3%), amenorrhea (16.7%) and 16.7% were asymptomatic. Endometrial pathology was found in 66.7%. On US all masses were unilateral and the majority was multilocular and multilocular-solid cysts typically contained large numbers of small locules. The GCTs were large tumors with a median largest diameter of 72mm (range 30-94) and manifested moderate or high color content at color Doppler examination. 66.7% did total hysterectomy and bilateral salpingo-oophorectomy. A conservative surgical treatment was performed in 2 cases and one of them became pregnant after treatment. Five patients (83.3%) presented clinical stage (CS) IA, and one CS Tis. The follow-up period varied from 1 to 10 years (mean 5.3). All 6 patients were alive and without recurrence. Conclusion: Recognition of the signs and symptoms of abnormal hormone production and consideration of these tumors in the differential diagnosis of an adnexal mass can allow for early identification, timely surgical management, and excellent cure rates. Although GCT usually presents low aggressiveness, the clinical staging continues to be the main prognostic factor and hence it determines the option for conservative surgery and the use of adjuvant therapy. Despite the good overall prognosis, long-term follow-up always is required.

**P05.02**
Results of Wertheim’s operation combined with formation of a neovagina using sigmoid colon segment. Case report  
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Objectives: Cervical cancer often requires extensive surgery - hysterectomy with parametrectomy, pelvic lymphadenectomy and resection of vagina (Wertheim’s operation). Sexual dysfunction after this type of operation is common due to loss of normal anatomy, pelvic nerve damage and short vagina. Formation of a neovagina is an important step in restoring normal sexuality for the woman. Our aim was to assess the results of this type of operation performed in Estonia for the first time. Material and Methods: A 24 year female patient was diagnosed stage IIA cervical cancer in July 2008 six months after Caesarean delivery. After effective neoadjuvant therapy Wertheim’s operation was performed in November 2008. Nearly 2/3 of the vagina was removed leaving 5 cm of it measured from the orifice. The operation proceeded with neocolpopoesis. A 7 cm sigmoid colon segment with vascular pedicle was anastomosed to shortened vagina. The results were assessed 3 years after the operation with systemic gynecological examination and applying validated sexuality questionnaire Female Sexual Function Index (FSFI). FSFI assesses 6 variables including desire, arousal, lubrication, orgasm, satisfaction and pain. The score may range from 2.0 to 36.0. Results: The examination revealed that the vagina was even and its diameter was normal. The anastomosis was wide and neovaginal length was 12 cm. The FSFI score of the patient was 26.1. Conclusions: Our results support the reports that Wertheim’s operation combined with vaginal reconstruction using a sigmoid segment is a safe procedure providing satisfactoty sexual life for the patient.
P05.03
Evaluation of ovarian masses in postmenopausal women
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Objective: The aim of this study was to analyze preoperative and postoperative findings of postmenopausal patients with ovarian masses in order to identify factors which could predict the nature of tumor before surgery. And to test accuracy of the Risk of Malignancy Index (RMI) in preoperative prediction of malignancy and treatment of ovarian masses. Materials and Methods: 52 patients with ovarian masses who were treated in 3 year period in Department of Gynaecology in Riga East Clinical University Hospital had involved in this retrospective study. Information was obtained from medical records for patients who met the inclusion criteria and registered in protocol. For statistical analysis we used SPSS v. 19 program. Results: Significantly more often patients with malignant histopathological findings complained about bloating, constipation and loss of appetite. There were a statistically significant positive correlation between malignant histopathological findings and: in bimanual examination detected fixed ovarian masses (p=0,004), in ultrasound estimated complex structure (p=0,003) and free fluid in Douglas pouch (p=0,000). Significantly more patients with malignant ovarian masses had elevated CA 125(p=0,000). There was statistically significant positive correlation between tumor nature (benign, malignant) and RMI categories (low, intermediate and high risk)(p=0,000). Conclusion: There are typical complaints, elevated serum markers, findings of gynecological examination and ultrasound which have positive correlation with malignant ovarian masses. Risk of Malignancy Index (RMI) is reliable method of preoperative discrimination of benign and malignant ovarian masses; moreover it is useful of triaging patients to different treatment groups.

P05.04
Benign infection processes and vulvar malignancies. Delay of diagnosis?
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Objectives: Cancer of the vulva is often misdiagnosed, especially in premenopausal women. Many cases are initially treated as infectious processes before referral and frequently may lead to inadequate initial treatment. We present two interesting rare cases of metastatic medullary carcinoma and rhabdomyosarcoma of the vulva in young premenopausal patients. Material and methods: A 43 year old woman with Multiple Endocrine Neoplasia (MEN) IIb syndrome presented with a painful enlargement of the left side of her vulva, which was initially presumed to be an inflammatory Bartholin's gland process showed no response to antibiotic therapy. A 19 year old woman, with right Bartholin's gland infection and no response to antibiotics, underwent excisional biopsy which revealed rhabdomyosarcoma. Wide local excision of the lesion was performed in both patients. The younger patient underwent bilateral inguinofemoral lymphadenectomy since the diagnosis of rhabdomyosarcoma was known from a previous biopsy. Results: Histology revealed a metastatic medullary carcinoma of the vulva in the patient with MEN IIb syndrome and rhabdomyosarcoma of the vulva with one positive node in the other patient. Conclusions: Differential diagnosis of a painful enlargement in the vulvar region should always include a malignant process, even in premenopausal women, and especially when there is no improvement of the symptoms. Biopsy and/or wide local excision of the lesion should be considered in order to exclude cancer and set diagnosis. MEN IIb syndrome is a clinical entity that may present multiple metastatic sites. To our knowledge this is the first case of vulvar metastasis as part of the syndrome.
Expression of CD105, CD31, and D2-40 in localized and disseminated endometrial carcinoma

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Objectives: Angiogenesis is a key component of tumor growth and metastasis. However, studies on the predictive value of markers for angiogenesis as related to tumor spread and patient prognosis have given inconsistent results. The aim of this study was to compare CD105 (endoglin), CD31 and D2-40 expression in local and disseminated endometrial carcinoma. Materials and Methods: Tissue sections from 17 Grade 2/3 endometrial carcinoma specimens were immunohistochemically stained for endoglin, CD31 and D2-40. Positively stained microvessels were counted in 20 fields of 40x magnification. Ki-67 staining was also performed to assess tumor proliferation rate. The results were correlated to the presence of metastases in comparison with the depth of myometrial invasion, lymphovascular invasion, and the age of the patients. Results: Nine patients had a disease confined to uterus and eight patients had a metastasized disease. The total microvessel density for endoglin was significantly higher in the group with metastases (117.63 ± 37.98 vs. 72.11 ± 27.75, respectively, p=0.016). CD31, D2-40 or Ki-67 did not differ significantly between the two groups. By univariable analysis, lymphovascular invasion (p=0.040) and CD105 expression (p=0.037) were the significant predictors for metastatic disease. By multivariable analysis (age, myometrial invasion, lymphovascular invasion, CD31, D2-40, Ki-67, CD105), only CD105 expression was the independent predictor for metastasis (p=0.037). Conclusions: This preliminary study suggests that CD105 or endoglin expression can potentially be used as a predictor for metastatic disease in patients with moderately or poorly differentiated endometrial carcinoma.

Effects of metronomic consolidatory chemotherapy administration on the numbers of regulatory T cells in peripheral blood in patients with ovarian carcinoma

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Introduction: It was discovered that patients with different types of oncological diseases have increased numbers of CD4+CD25+ regulatory T cells (Treg) in the peripheral blood. Treg participate in the control of anti-tumor immunity. Higher levels are an unfavourable factor. The purpose of experimental consolidatory therapy is to strongly decrease the numbers of circulating regulatory T cells and thus theoretically intensify natural anti-tumor immunity against persisting chemoresistant cells. Aims of study: To confirm if the percentage of Treg correlates with the prognosis of patients with ovarian carcinoma. To compare the effect of particular chemotherapeutics in metronomic doses on the number of Treg. Patients and Methods: We follow up 3 groups of patients. Group A: receive low dose of cyclophosphamide Group B: receive low dose of etoposid. Group C (control group) without consolidatory therapy. Protocol of the study: 1. radical surgery, 2. 6 - 8 series of combined chemotherapy, 3. experimental consolidatory chemotherapy. Results: 32 patients is included in the study, median follow up time is six months. 4 patients suffer from early relapse of the disease. We have found normal levels of Treg in patients with consolidatory chemotherapy in contrast to patients without consolidatory chemotherapy. Before 1 relapse of the disease significant elevation of Treg was found. There was no significant difference between relaps free survival curves in patients use cyclophosphamide and etoposide. Conclusion: Monitoring the numbers of Treg is a hopeful prognostic marker of disease development and may provide insight to both effect of primary treatment and new experimental treatment procedures.
**P06.01**

Subcapsular liver hematoma in pregnancy complicated by the HELLP syndrome, a case report

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Objectives: Spontaneous subcapsular liver hematoma (SLH) with or without rupture is an unusual but potentially lethal complication of pregnancy, often associated with severe preeclampsia or the HELLP syndrome. Due to its variable presentation and low incidence, the diagnosis of SLH is often delayed, and medical and surgical treatments may be inappropriate. We describe the outcome after a SLH in pregnancy.

Materials and Methods: Case report.

Results: Pregnant woman, 35-years-old, with gestational hypertension was admitted at 32 weeks of gestation, complaining of neck pain, irradiating to right shoulder and upper limb with worsening of blood pressure (BP) and proteinuria. The laboratory tests showed thrombocytopenia, increased liver enzymes and hypoproteinaemia. Later she complained of epigastric/right upper quadrant pain, with BP=119/54mmHg, proteinuria and worsening on the laboratory findings. Fetal heart tracing began to show decreased variability and was performed an emergency cesarean section, a live-born infant was delivered. In the peritoneal cavity we find a dark red fluid, approximately 1000 ml. The lower edge of liver was irregular with no active bleeding. The CT scan of the abdomen showed a large SLH of the right lobe with intact capsule.

The patient was discharged 4 weeks after admission in stable condition.

Conclusions: The etiology and pathophysiology of SLH are not completely understood. The diagnosis includes clinical examination, laboratory findings, and liver imaging. There is no agreement on the best approach to treat this complication and optimal management is still evolving. A multidisciplinary approach can lead to remarkable decrease in the high mortality rate.

**P06.02**

Urinary N-acetyl-beta-D-glucosaminidase (NAG) excretion in pregnant women with hypertensive disorders

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Objectives: N-acetyl-beta-D-glucosaminidase (NAG) is a hydrolyzing enzyme which activity is especially high in renal tubular cells. It is released into urine from the lysosomes of the proximal renal tubules epithelium. Therefore an elevation of urinary NAG activity serves as an early marker of tubular cell dysfunction or damage. Aim: The aim of our study was to assess the renal tubular damage in pregnant women with various types of hypertension by measuring of urinary NAG activity. Material and methods: The study population consisted of 93 pregnant women divided into four groups: 1. Pregnancy Induced Hypertension (PIH, N=36); 2. Preeclampsia (PE, N=21); 3. Chronic Hypertension (CH, N=16) and Healthy Controls (CN, N=20). Urinary NAG activity was measured by spectrophotometric method and the median values of NAG were expressed as U/L and as U/g of urinary creatinine. The four groups were compared using the Mann-Whitney test and the Kruskall-Wallis test for multiple comparisons. A value of $p < 0.05$ was considered as statistically significant. Results: NAG values in PE group (31.2 U/L; 25.4 U/g creatinine) were significantly higher ($p<0.001$) in comparison to all other study groups. There were no differences in NAG values between PIH (6.2 U/L; 5.9 U/g creatinine), CH (5.7 U/L; 5.8 U/g creatinine) and CN (4.4 U/L; 4.8 U/g creatinine) groups. Conclusions: In the preeclamptic patients, renal tubular injury, expressed as higher urinary NAG values, was found. Further studies are required to find a cut-off value of NAG which can predict PE in hypertensive pregnant women.
In the case of placenta percreta accompanied by uterine rupture at 17 weeks of pregnancy in a multipara woman with a history of two Cesarean Sections, emergency laparotomy was performed and revealed a rupture in the anterior wall of 3 cm width. A supracervical hysterectomy was carried out with the ovaries being preserved. The pathological examination of the uterus showed placenta percreta. Abnormal placenta after prior uterine surgery and especially caesarian section may cause spontaneous rupture of the uterus in the 2nd trimester and prior to the onset of labor.

Purpose: To describe a pregnancy outcome after repeated elective cervical cerclages (CC) in women who suffer from cervical incompetence (CI). Patients and Methods: case report. Results: We present a case of a 38-years-old woman, HCV infected, G6P1, with a previous history of 4 late abortions, CI and repeated cerclages in her 3 consecutive anterior pregnancies. She had previously delivered vaginally her first male infant (3310g) after CC at 14 weeks. In current pregnancy, she underwent elective cerclage at 14 weeks. A MacDonald cerclage was performed with Mersilene tape and the knot was tied at 12 o’clock position. No complications were noted during the procedure and an US at that time demonstrated no abnormal findings. The pregnancy ended up at 40 weeks and a baby girl weighing 4065g (Apgar 9/10) was delivered after removal of the CC at about 37 weeks. Conclusion: A strong risk factor for preterm birth is a prior history of CI, based on repeated, painless, mid-trimester losses or preterm delivery. In women who have had a cerclage in a prior pregnancy for nontraditional indications, their physicians are faced in the subsequent pregnancy with the decision to repeat the cerclage or not. This is further complicated by the associated risks and complications of cerclage placement (exposure to anesthesia, infection, rupture of membranes, preterm contractions, vaginal bleeding, and endometritis). However, like we reported, in cases of a previous history of 3 or more late abortions, cerclage performed in the first half of pregnancy shows a significant beneficial effect.

Objective: To evaluate maternal and fetal outcome in women with metabolic syndrome (MS) and complicated pregnancy history. Materials and methods: We examined 125 patients aged 22 to 43 years with MS who had complicated pregnancy history. All patients were tested for proinflammatory cytokines polymorphisms, hereditary and acquired forms of thrombophilia. 53 women (I group) received...
antithrombotic prophylaxis (low molecular-weight heparin under the control of D-dimer, folic acid, antioxidants and natural progesterone for indications) during preconceptive period and during pregnancy; 72 women (II group) - from the II or III trimester during all pregnancy. Results: Multigenic defects of thrombophilia were verified in 100 % of cases; the feature of multigenic defects is that the 4G/5G polymorphism of plasminogen activator inhibitor-1 gene was found in 93.6% of cases. Acquired antiphospholipid antibodies were verified in 11.2% of cases. Polymorphisms IL-1β -31T/C in 90.4%, IL-6 -174 G/C in 63.2%, tumor necrosis factor-α-308G/A in 25.6% of cases. Due to this treatment there were not recurrent fetal loss, severe pre-eclampsia and all babies were alive in I group. This treatment had little effect when women received it in case pre-eclampsia and fetoplacental insufficiency occurred. Fetal loss occurred in 8.3% of cases in women of II group. Conclusions: We suggest that proinflammatory and thrombophilic status is an important pathogenetic factor of recurrent fetal loss, severe pre-eclampsia and other obstetric complications in women with MS. And therapy with low molecular-weight heparin during preconceptive period and pregnancy may be effective and allows preventing pregnancy complications, adverse fetal outcomes.

P10.01
Short-term outcomes: a comparison between late-preterm and term infants
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Objective: There is a relative paucity of data regarding neonatal outcomes in the late preterm cohort (34+0 to 36+6 weeks). This study sought to assess differences in adverse outcomes between infants delivering 34+0 to 36+6 weeks (late-preterm infants), and 37 weeks or later (term infants). Materials and Methods: This was a retrospective analysis of short-term neonatal outcomes in women who delivered at the University Hospital of Foggia between January 2009 to August 2010. Patients delivering 34+0 weeks or later were included (n =1130) : late-preterm (n = 57) and term infants (n = 1073). The main outcomes analyzed were : respiratory distress requiring some degree of in-hospital respiratory support during the birth hospitalization (RDS); hypoglycaemia; hyperbilirubinaemia; anaemia; intraventricular haemorrhage (IVH). Significant associations between outcomes and gestational age at delivery were determined using the X² test. A p < 0.001 was considered statistically significant. Results: Compared with term, late-preterm infants had higher rates of RDS (14.04% vs 0.56%, p < 0.0001), hypoglycaemia (21.05% vs 1.49%, p < 0.0001), hyperbilirubinaemia (31.58% vs 1.58%, p < 0.0001), anaemia (3.51% vs 0.28%, p < 0.0001) and IVH (3.51% vs 0.19%, p <0.0001). Conclusion: Late preterm infants have increased risk of respiratory distress syndrome, hypoglycaemia, hyperbilirubinaemia, anaemia and intraventricular haemorrhage, compared with term infants. So, a particular care should be applied for late-preterm, considering them as patients with a risk higher than term infants.

Key words: late-preterm infants, adverse neonatal outcomes.

P10.02
Anemia in pregnancy and perinatal complications
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Objective: To evaluate the clinical profile of patients having severe anemia in pregnancy. Materials and methods: This prospective study included 145 antenatal patients presenting with severe anemia (hemoglobin <7.0 g/L). Descriptive statistics were calculated for the study variables. Results: One hundred forty five patients confirmed to have iron deficiency anemia were enrolled in this study. In the first trimester of pregnancy anemia was found in 20.4% of women, in the second trimester 37.4%, whereas in the third trimester of pregnancy anemia was found in 42.6% of cases. 9.6% had severe anemia (hemoglobin <7.0 g/L), and 31.3% of them were also anemic prior to current pregnancy. Neonates born from women with anemia had lower birth weight and small-for-gestational age (SGA) births, (p<0.01). There was no significant benefit of treatment with iron folate on maternal anemia in third trimester (RR = 1.03; 95% CI: 0.87 - 1.22), whereas treatment of anemia in first and second trimester showed a significant reduction in SGA by 9% (RR = 0.91; 95% CI: 0.86 - 0.96). Anemic pregnant women had also more complications during
delivery compared with pregnant women without anemia (p<0.05). Conclusion: This prospective study suggests that anemia in pregnancy is associated with adverse pregnancy outcomes. Supplementation with iron-folate in the first and second trimester could be of potential benefit to the mother and the fetus. These benefits could relate to prevention of maternal complications and reduction in other adverse pregnancy outcomes such as small-for-gestational age births, low birth weight, stillbirths, perinatal and neonatal mortality.

P11.01
Role of pregnancy-associated plasma protein A(PaPPA) during prenatal care
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Objectives: Pregnancy-associated plasma protein A(PaPPA) detection during prenatal care can be used for detection not only pregnancy related problems. Case report. Materials and Methods: 30 years old woman, 2nd pregnancy, 1st delivery, 14th week. PaPPA test - 11443.02 mlU/ml (3.18MOM)~ > 3 times higher as normal was refered to Riga BKUS Medical Genetic consultation for further investigation. US investigation at 12th week - normal-no signs for fetal abnormality. Usually PaPPA is lower for Dauna syndrome. Results: Patient need further investigation to detect reason for so high PaPPA test. May be it related to non pregnancy associated sickness. Conclusions: Will follow after next investigations and consultations with different specialists(infectionologists, cardiologists..) and be presented during congress

P12.01
Impact of endometrial polyp location on pregnancy rates in infertile women
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Endometrial polyps are a common clinical condition, frequently diagnosed by ultrasound. Reported in 15% to 24% of infertile women, they have been considered as a real infertility factor. According to recent papers, polypectomy has said to improve pregnancy rates, ranging from 23% to 65%. Material & Methods: A retrospective analysis of 83 infertile women who had endometrial polyps, suspected by ultrasound and confirmed by hysteroscopy was carried out. Women aged > 38 years and/or with FSH basal level > 12U/L were excluded. Polyps were excised by either polypectomy or curettage. All samples were examined for pathology. The endometrial cavity was subdivided into five location categories: uterotubal junction, anterior uterine wall, posterior uterine wall, lateral uterine wall, and multiple. Pregnancy rates were compared between the five location categories. Of polyps, 9.2% were located in the uterotubal junction, 29% in the posterior wall, 14.4% in the anterior wall, 11% in the lateral wall and 37.4% in multiple locations. The distribution of infertility factors was the same for each group. The mean polyp size was 9.8 mm by ultrasound. The pregnancy rate after surgery was by location: uterotubal junction, 46.2 %; posterior uterine wall, 22.9 %; anterior uterine wall, 11.8 %; lateral uterine wall, 15.1 %; and multiple, 32.4 %. Endometrial hyperplasia was found in 8% of the cases. The pregnancy rate after surgery at the uterotubal junction was significantly higher than that of other locations. A serious infertility factors since that their excision is improving significantly the pregnancy rate.

P12.02
A prospective, randomized, controlled trial in patients with proven poor ovarian responsiveness to compare in vitro fertilization (IVF) outcome after early vs mild-follicular LH exposure
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Objectives: to compare in a prospective, randomized, controlled study the outcome of IVF in GnRH–analogue long protocol cycles for poor responders performed using recombinant FSH (300 IU) in addition to recombinant LH (150 IU) either from day 1 (early exposure, EE) or from day 7 (late exposure, LE). Materials and Methods: 530 women with poor ovarian responsiveness during the first IVF cycle, undergoing
the second IVF attempt, were randomized to early (264 patients, EE group) or late (266 patients, LE group) LH exposure. Primary outcome was the number of oocytes retrieved. Secondary outcomes were: cancellation rate, total gonadotropin dose, duration of ovarian stimulation, number of embryo, implantation rate, pregnancy rate. Results: The only significant difference between EE and LE groups was the total LH administrated dose, which was significantly higher in the group (EE) receiving rLH from day 1 (p<0.01); the pregnancy rate was a little higher in LE group, but this difference was not statistically significant. All the other variables, including the secondary outcomes, were similar in the two groups. Conclusions: In proven poor responders, the administration of 150 IU of recombinant LH from day 1 or from day 7 of ovarian stimulation has the same impact on IVF outcome.

P12.03
Ovarian stimulation in patients with poor ovarian responsiveness undergoing in vitro fertilization (IVF): a prospective, randomized, controlled comparison between a classical and a mild protocol
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Objectives: to compare a classical vs a mild protocol of ovarian stimulation for IVF, in patients with hormonal and ultrasound characteristics of poor responders. Materials and Methods: 201 patients with basal FSH>10 IU/l and antral follicle count <8, were randomized as follows: 143 underwent a classical long protocol GnRH-agonist from mid-luteal phase plus 250-400 IU /day of recombinant FSH (LONG stimulation group), 134 received Clomiphene citrate 100 mg/day during day 2-6 of the cycle plus 150 IU/day of recombinant FSH from day 5 of the cycle plus GnRH-antagonist 0.25/day from day 8 of stimulation (MILD stimulation group). Follicle growth monitoring, oocyte pick-up, in vitro fertilization, culture and embryo transfer were performed in the same way for both groups. Results: MILD stimulation was significantly shorter, with a lower total dose of gonadotropins, lower peak estradiol level and lower preovulatory endometrial thickness than LONG stimulation (p <0.01). In the LONG group significantly more oocytes were obtained (p<0.01), but the FSH dose/oocyte, ovarian sensitivity index, was higher (p <0.01). Although the number of oocytes and embryos available for transfer was significantly higher in LONG stimulation, no significant differences were observed in terms of pregnancy rate, clinical pregnancy rate and ongoing pregnancy rate. In 43 patients undergoing both types of treatment (CROSSOVER subgroup) the results were similar to those shown for the whole sample. Conclusions: In poor responders, MILD stimulation protocol is a valid alternative to standard ovarian stimulation as it obtains a comparable success rate and requires a significantly lower amount of medications.

P13.01
Stress urinary incontinence surgery with MiniArc in Tartu University Women's Clinic: follow up at one year
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Objective: We report 1- month and 12-month outcomes of the MiniArc single incision sling for the treatment of female urinary incontinence. Materials and Methods: Retrospective study of surgery with AMS MiniArc swing system. 107 patients were operated from January 2010 to December 2010. All patients suffered from predominant stress urinary incontinence. Surgical candidates underwent historical and physical examination and urodynamic testing as indicated. The average age was 60 years (35-87). Patients were checked at 1-2 months (97% of operated patients) and 1 year after intervention (88% of operated patients). Objectively the leakage of urine was assessed by cough test and subjectively leakage of urine was assessed by ICIQ-SF questionnaire. Results: 1-2 month after surgery, 83% of the patients stated an improvement, while 71% stated dry and 17% of the patients stated the same or the worse in their incontinence status. One year after surgery, 75% of the patients stated an improvement in their incontinence status, while only 61% to be completely dry. Quality of life was not improved or took a turn for the worse in incontinence status in 25% patients. We had one intraoperative complication (0.9%)-bladder perforation. Late complications included 2 required tape excision (1.9%). Conclusions: The MiniArc single incision sling is safe, but the results of this simplified tape are worse than those of classic suburethral tape.
P13.02
Post operative complications after tension-free vaginal tape versus transobturator tape procedure for stress urinary incontinence

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Objective: To determine the frequency of post operative complications after tension-free vaginal tape (TVT) compared with the transobturator tape (TOT) procedure in women with stress urinary incontinence (SUI).

Study design: Prospective study of all consecutive women with urodynamically confirmed SUI undergoing anti-incontinence surgery between January 2000 and January 2010. All procedures were performed by experienced urogynaecologists well trained in TVT and TOT surgery.

Results: The study population included 366 women (mean age 59.5 years), 243 in the TVT group and 123 in the TOT group. The groups were similar in terms of demographics, preoperative data, and cure rates. De novo urgency occurred in 13.4% of patients at 6 months after surgery, in 19.3% at 12 months, and in 22.1% at 36 months. De novo urgency was significantly more frequent in the TVT group than in the TOT group at 12 (22.2% vs 11.2%, P = 0.025), 24 (24.8% vs 12.3%, P = 0.033), and 36 (0% vs 24.7%, P = 0.034) months. Cure rates were similar in both groups. The final adjusted cure rate was 87.3% (319/366).

Conclusion: Treatment of SUI using the TOT procedure was associated with a lower rate of de novo urgency.

Keywords: post operative complications; Tension-free vaginal tape; Transobturator tape; Stress urinary incontinence

P13.03
Autologous adipose stem cells (ASCs) in treatment of female stress urinary incontinence

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Objective was to find out if transurethral injections of autologous adipose stem cells are an effective and a safe treatment for female stress urinary incontinence (SUI). The primary endpoint was cough test. Validated questionnaires were used for determining the subjective cure rate.

Materials and methods. Five SUI patients were treated with autologous adipose stem cells combined with bovine collagen gel and saline solution. The subcutaneous fat from lower abdomen was collected under local anaesthesia. The ASCs were isolated and augmented for three weeks. Mixture of ASCs and collagen was injected transurethrally via cystoscope. The patients are being followed at 3, 6 and 12 months after the injections by gynaecological examination, ultrasonography, cough test, 48h pad test, standardized questionnaires and urodynamic evaluations.

Results. With the exception of small haematomas there were no adverse events. At six months, one out of five patients displayed a negative cough test with full bladder filled with 500ml of saline. There was some subjective improvement with all five patients, but so far three patients have been scheduled for operative treatment while two patients were satisfied. Conclusions. Our preliminary results were not as effective as hypothesized according to the previous clinical cell therapy studies. The bovine collagen gel may not be the ideal carrier for the ASCs. Three patients had a recurrent SUI that is often challenging for operative treatment as well. At this point we are looking for better bioabsorbable injectable material for ASCs and an ideal technique for transurethral injections.
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