

Oral Presentations

Fertility/Reproductive Medicine

FC2.01

Accurate biopsy and ultrastructural morphological characterisation of decidua parietalis and basalis by a novel hysteroscopic technique: insight into the early events at the embryo-maternal interface
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Objective: An understanding of early events in human placentation might shed light on disorders such as miscarriage, intrauterine growth restriction and pre-eclampsia. The role of extracellular matrix and its breakdown by the invading trophoblast has gained wide attention in recent times especially in relation to the mechanisms of myometrial spiral artery remodelling. Rigorous research is hampered in part by the poor accuracy of biopsy material used, and discrepancies in the results of studies of trophoblastic invasion have been acknowledged. We aimed to obtain accurate biopsies of decidua basalis and parietalis using a novel direct-vision technique and describe ultrastructural morphological differences in the two decidua.

Methods: The biopsy was performed in pregnancies undergoing first trimester surgical termination. Following cervical dilatation, a rigid hysteroscope is introduced into the cervical canal. The pressure of the saline distending medium shears the membranes of the gestation sac away from the decidua parietalis (DP), leaving the pregnancy suspended at the site of the early placenta, the decidua basalis (DB). Under direct vision a biopsy forceps is used to sample the decidua parietalis, and then the forceps is introduced beneath the gestation sac to sample the decidua basalis. The biopsies were immediately fixed and processed for light and electron microscopy.

Results: Morphological and immunohistochemical studies confirmed the accuracy and adequacy of the samples, with a high (40%) myometrial spiral artery presence, and the presence of trophoblast in DB and its absence in DP. Ultrastructural morphological differences between the two types of decidua were described with prominent changes due to breakdown in the extracellular matrix of decidua basalis brought about by the trophoblast invasion.

Conclusion: We describe a simple and accurate novel technique of decidual biopsy under direct vision that has the potential to revolutionize research on trophoblast-decidua interactions and ultrastructural morphological characterisation of the two types of decidua in early pregnancy.

FC2.02

Plasminogen activator inhibitor-1, polycystic ovaries and recurrent miscarriage
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Polycystic Ovarian Morphology (PCOM) is found in 40% of women with recurrent miscarriage (RM). These women have a significantly lower live birth rate than those with normal ovarian morphology. Women with PCOM have disorder in their fibrinolytic response. This response is governed by a balance between plasminogen activator and plasminogen inhibitors. Studies have reported that both urokinase plasminogen activator and plasminogen activator inhibitor (PAI-1), are associated with repeat polymorphism (5G or 4G), situated at 675 bp in the PAI-1 gene promoter. PAI-1 plasma levels are higher amongst those carrying the 4G/4G polymorphism, when compared to those with the 4G/5G or 5G/5G polymorphism.

Objective: To measure the prevalence of the 4G/5G polymorphism in PAI-1 amongst those with PCOM and recurrent miscarriage versus those with recurrent miscarriage and 'normal' ovarian morphology.

Methods: Two hundred and ninety women with recurrent miscarriages and PCOM and a matching control group of 257 women with unexplained recurrent miscarriages were recruited to this prospective study at St Mary's hospital recurrent miscarriages clinic. Study group inclusion criteria included the following: PCOM, <40 years, had three consecutive first trimester miscarriages (<12 weeks gestation) Normal uterine anatomy on two dimensional ultrasound and normal peripheral blood karyoty. APA negative and normal factor V genotype. Non-hormonal method of contraception <3 months since the last pregnancy.

Results: The prevalence of the 4G/5G polymorphism in PAI-1 was significantly higher (92/192) amongst those with PCOM and recurrent miscarriage versus those with recurrent miscarriage and 'normal' ovarian morphology (71/235; $P < 0.01$). There was no significant difference in the prevalence of the 4G/5G polymorphism between those with 'normal' ovarian morphology and the control group of those with a previous uncomplicated pregnancy.

Conclusion: The prevalence of 4G/5G polymorphism in PAI-1 was significantly higher amongst women with PCOM and recurrent miscarriages.

FC2.03

Mechanisms of the follicular wall thickening in polycystic ovarian syndrome models Santoso, B¹; Prabowo, P¹; Sucipto²

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Objective: Polycystic ovaries are caused by chronic anovulation and steady state anovulation where about 20–100 cysts are found in each ovary, but a mechanism of the formation of polycystic ovaries by hiperandrogen is not understood yet. This study is conducted to investigate some mechanisms of the follicular wall thickening, which can result in resting follicles among patients with PCOS.

Methods: This study is an experimental study by using *Rattus novergicus* as PCOS model, compared with control study in every estrus cycle phase of *Rattus novergicus*, ie, proestrous, estrous, metestrous and diestrous phase. Each study group and control group is five rats so that all are 25 *Rattus novergicus*. PCOS model group was injected with testosterone propionate with dose 1 mg/100 BW, whereas control group with propylene glycol injection. The examination of MMP-9, TIMP-1 activity by ELISA activity and Collagen-4 used immunohistochemistry staining. Statistic analysis used ANOVA test.

Results: The lowest MMP-9 activity was observed in PCOS model group compared with the entire control groups with MANOVA test suggesting significant difference ($P = 0.0001$). Inconsistent with the results of MMP-9, the testing results of TIMP-1 activity in PCOS model group showed the highest level compared with the entire control groups with MANOVA test demonstrating significant differences between Estrus, Metestrus and Diestrus groups ($P = 0.0001$). Collagen-4 expression in the PCOS model group reached the highest level (411 600 cells) than all control groups with the statistical test showing significant difference ($P = 0.0001$).

Conclusion: MMP-9 activity decreased and tissue TIMP-1 activity raised evidently. The Collagen-4 expression also increased and follicular walls were thickened in follicles of the *Rattus novergicus* as PCOS model. This condition generated resting follicles and finally caused polycystic ovaries.

FC2.04

The presentation, treatment, and outcome of women suffering complications of unsafe termination of pregnancy in Monrovia, Liberia: comparison of data preceding and following hand-over of a Medicines Sans Frontiers (MSF) hospital to the Liberian Ministry Of Health (MOH) Lledo-Weber, P¹; Clack, A²

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Objective: Benson Hospital was an MSF hospital providing women and children's healthcare in Monrovia, Liberia. In March

2010 Benson Hospital transferred its activities to an MOH facility. Complications of termination of pregnancy (TOP) was the most common reason for admission to Benson hospital's gynaecology department and a large proportion of these were suspected to be as a result of unsafe TOP. The study objectives were: firstly, to quantify the admissions and morbidity resulting from unsafe TOP practices, and, secondly, to determine whether the transfer of the hospital to MOH control had any impact on the presentation of women with complications of unsafe TOP.

Methods: Data was collected before the closure of Benson Hospital: 11/01/2010–23/03/2010, and after opening of the MOH hospital: 02/04/2010–22/06/2010. All patients admitted to the hospital with complications of a TOP were asked whether they had induced their pregnancies. Data for these patients was anonymised and information regarding mode of induction, complications, treatment and outcome were recorded

Results: The total number of admissions for TOP in the first period was 110 and in the second 74. Of these, 52 (47%) were treated for complications of an unsafe TOP in the first period of the study and 24 (32%) in the second. Of the 76 unsafe TOP, 35 involved a surgical termination, 27 an overdose, six introduction of a stick trans-cervically and 13 the consumption of abortive herbs. Complications included: septic TOP, 44, pelvic abscess, 7, severe anaemia, 10, herbal intoxication, 5. Seventy-three patients required evacuation of retained products, seven a laparotomy for sepsis/perforation and 10 a blood transfusion. Three patients died during the study period.

Conclusions: Complications of TOP was a common reason for admission to both the MSF and MOH run hospitals, and was associated with significant levels of morbidity. Both the total number of admission for TOP and the percentage of patients admitting to having self-induced their pregnancies fell after transfer of care to MOH-control. This was despite an increase in obstetric and paediatric activity during the same period. Unsafe TOP practices are a significant cause of morbidity amongst women of reproductive age in Liberia's capital. Data from this study also suggest that transfer of care from MSF to the MOH may be associated with a decreased willingness of women to present with the complications of an unsafe TOP.

FC2.05

Risk factors for ectopic pregnancy: a cross-sectional study in a sexually-conservative population Salem, A-F

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Objective: Determine the frequency of common risk factors in patients presenting with ectopic pregnancy in a population with an inherent low prevalence of sexually transmitted diseases.

Methods: Retrospective review of a large database of pregnant women presenting to the obstetric department at Al-Bashir Hospital (Amman, Jordan) between January 2010 and March 2011. Age, parity, previous obstetric history, history of sexually transmitted diseases, contraceptive use and surgical history were accurately recorded. Diagnostic criteria for ectopic pregnancy included detection of products of conception within the fallopian

tubes, ultrasonic documentation an extra-uterine gestational sac and/or a rise in β -hCG seen after dilation and evacuation. All cases were confirmed by histopathological examination of surgical specimens. Data was analyzed to determine the possible risk factors of ectopic pregnancy.

Results: During the study period there were 15 153 hospital births out of which 56 patients were ultimately diagnosed with an ectopic pregnancy giving an incidence of one ectopic pregnancy per 270 births (0.37%). The mean age was 29.1 years (range 14–43). The mean parity was 3.6 (range 0–10). Ectopic pregnancy was more common among multiparous as opposed to nulliparous women, 46 (82.1%) vs. 10 (17.9%) women respectively. The location of the tubal pregnancy was in the right side in 31 patients (55.4%) and in the left side in 25 patients (44.6%). Twenty patients (35.8%) had previous history of evacuation of retained products of conception, 11 patients (19.6%) had history of previous abdominal surgery (laparotomy 3; caesarean section 2; ovarian cystectomy 2; appendectomy 1; salpingectomy for ectopic pregnancy 1 and laparoscopy 1) while 10 patients (17.9%) had history of previous dilatation and curettage. Previous intra-uterine contraceptive device use was documented in 8 (14.3%) and hysterosalpingogram was documented in one women.

Conclusion: Previous sub-clinical salpingitis following evacuation of retained products of conception, dilatation and curettage or vaginal birth, often leaving no macroscopic signs of tubal damage, is the most common risk factor for ectopic pregnancy in a population with low prevalence of sexually transmitted diseases. This is in clear variance to results reported in Western countries.

FC2.06

The value of aspirated peritoneal fluid at laparoscopy in predicting tubal blockage in infertile Sudanese women

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Background: Infertility remains a major clinical and social problem; the most common cause of infertility is tubal blockage.

Objective: A hospital based prospective study was conducted at the Minimal Access Gynecology Surgery (MAGS) unit at Omdurman Maternity Hospital from October 2009 to March 2011 to study the aspirated peritoneal fluid at laparoscopy of infertile Sudanese women bacteriologically, cytological as well as estimating the levels of sugar and protein; then correlate the results to tubal blockage.

Methods: The peritoneal fluid was aspirated from cul-de-sac of 146 infertile women at laparoscopy and sent to the laboratory.

Results: Tubal blockage was found in 66 (45.8%), women. The bacteriological studies showed sterile aspirate with no growth while the cytological studies revealed inflammatory cells in the fluid mainly macrophages, lymphocytes and plasma cells. The incidence of tubal blockage was found to be significantly higher in patients with inflammatory cells indicating chronic inflammation. Comparison of abnormal sugar level in patients with blocked and patent tubes revealed statistically significant increase in the group

with blocked tubes. The protein level revealed statically significant difference in patients with endometriosis

Conclusion: Cytological studies of peritoneal fluid are of value when correlate to tubal pathology in infertile women while sterile fluid in cul-de-sac does not exclude PID either in acute or chronic stage. However abnormal level of sugar in the peritoneal fluid has a positive correlation with blocked tubes and the protein level is high in cases of endometriosis.

FC2.07

Should Gynaecologists perform female appendicetomy? PIDEENA – A study protocol **Pearson, G¹; Eckford, S²; Cahill, D³**

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Introduction: Appendicectomy is the most common general surgical operation. However, the decision to operate on a diagnosis of appendicitis is based on clinical suspicion and not always accurate; over a quarter of appendix specimens removed will be macro- or microscopically normal ('negative appendicetomy', NA).

Pelvic inflammatory disease is most commonly caused by the chlamydia trachomatis, the gonococcus, and anaerobic bacteria. The peak incidence of the is in young women. Untreated PID can have serious consequences on reproductive health, including infertility and premature delivery. The decision to treat PID, like appendicitis, is based on the clinical history rather than firm diagnosis. At laparoscopy, PID may be present without the classic signs of pus in the pelvis, adding to diagnostic difficulty.

We made the observation that more young women than young men underwent negative appendicetomy. We hypothesed that such an excess may be due to alternative sex-specific inflammatory process that presented with a similar clinical picture to appendicitis (PID). We developed a study protocol to investigate the hypothesis.

Pilot data: Permission was granted to access local Hospital Episode Statistic databases. Data on positive and negative appendicetomy rates over the 2000–2010 period was collected and Chi-squared tests performed in StatsDirect. The data confirmed the clinical suspicion that the proportions of NA was significantly greater in young females compared to males (Figure 1).

Study design: Interventional cohort study (flow chart; Figure 2); in recruitment. Power Calculation: Pilot data gave an NA rate of 25–35%. The male NA rate was 6%. Background Chlamydia prevalence was 6% (other pathogen rates much lower). Assuming a 2:1 cases:control and 25% PID rate in the NA group, for $\alpha = 0.05$ and $\beta = 0.80$ we need 47 cases and 94 controls.

Conclusions: This will be the first prospective study investigating whether PID-causing pathogens are detectable in women with histologically 'negative' appendicitis. UK-wide and international recruitment centres and collaborators are being sought.

FC2.08

Virtuous parents-to-be? A new approach to ethical problems at the beginning of life**Chin, J**

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Modern reproduction is a complex and dynamic field. New reproductive technologies, including pre-implantation genetic diagnosis, give parents-to-be greater choice over the type of child they may conceive. New tests do not only give parents the opportunity to avoid disease (e.g. Trisomy 21) but also select certain characteristics of their future child, including sex. Given the rate of technological progression, it is plausible that parents will soon be faced with an increasing array of characteristics that they will be able to select in their children. Whilst this may be seen as a boon for consumer choice, some have raised substantial ethical concerns regarding parents' use of these technologies to, for example, create a deaf child. It has proved difficult, however, to articulate ethical concerns at the beginning of life using well-recognised concepts of autonomy, beneficence and harm. In this paper, I argue that it is more useful to think about good (and bad) reproductive choices as good parental decisions. Good parents act with love, compassion and understanding, i.e. good parents are virtuous parents. Thinking about ethical problems in this way reinvigorates discussions about the beginning of life and yields results; it helps us to articulate our concerns about creating a deaf child and selecting the sex of our children. This approach illuminates the way modern reproduction should be and, perhaps, the way it should head.

FC2.09

Successful myomectomy during caesarean section: a surgical challenge (case report)**Deb, P; Badawi, F; Muzaffar, S**

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Background: During pregnancy the incidence of leiomyoma is reported as 2%. They are mostly asymptomatic, occasionally complicated by red degeneration, cystic degeneration and an increase frequency of spontaneous termination of pregnancy, preterm labour, premature rupture of membranes, antepartum haemorrhage, malpresentation, obstructed labour, caesarean section, and postpartum haemorrhage. Removal of myomas is generally delayed until after delivery as the size becomes smaller, easily accessible, and less blood loss during surgery. Some reports have shown that myomectomy during caesarean delivery can be successfully done. The medical literature has reported an increase in myomectomy during caesarean section in the past decade. Controversy persists among reports of myomectomy being performed during pregnancy. We present a case of large asymptomatic myoma diagnosed during pregnancy which was successfully removed during caesarean delivery, as it was completely obstructing the lower part of uterus and the baby was pushed to the fundus posteriorly which made access difficult to deliver the baby.

FC2.10

Ethics on procreation. Does everyone have the right to found a family?**Panagiotopoulou, N**

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Background: Family is recognized as the natural and fundamental group unit of society and it is entitled to protection by society and the State.¹ However, an effectiveness assessment on access criteria for advance fertility treatment funded by the National Health Service, UK in people who need help to procreate identified serious ethical issues associated with these criteria.

Objective: Our objective was to review these aspects using the principles of the moral law.

Methods: The reflexive socratic approach was used.

Results: Arguments for restricting the right to form a family are against the principles of: (i) equality; regulation or practices that allow or prevent one from founding a family on the grounds of sexual orientation, marital status, property or others imposes a relative disadvantage to a group of people, this is discrimination against them, (ii) Freedom and choice; regulation or practices that allow or prevent one from founding a family on the grounds of personal choices such as smoking, age or others imposes one's perception of what good life is on others and prevents people's freedom to choose the best life prospects for their children based on their own values, (iii) Autonomy; regulation or practices that allow or prevent one from founding a family restricts people's ability to decide and be accountable for their actions.

Conclusions: The right to found a family should be accorded to everyone. However, the community's interests in relation to this right should be assessed in the first instance before deciding on its nature; positive right that needs supported or negative right that should not be prevented by the State.

Reference:

1. United Nations (1948). Universal declaration of human rights. Retrieved from www.un.org/en/documents/udhr/

FC2.11

Pregnancy outcome following laparoscopic conservative surgery in advanced endometriosis
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Objective: The objective of this non-comparative, retrospective, observational series is to study the pregnancy outcome and improvement in quality of life (QOL) after laparoscopic conservative surgery in subfertile ladies with advanced endometriosis (rAFS score >40) with and without other associated treatable factors.

Methods: Seven hundred and twenty patients have been operated between 1995 and 2010 by laparoscopic surgery for endometriosis. Mean age was 31.7 (23–38) years with primary ($n = 590$, 81.9%) or secondary ($n = 130$, 18.1%) infertility of mean duration 34.7 (9–84) months. Diagnosis of endometriosis and other factors was arrived at by clinical features and ultrasonography and confirmed

by diagnostic laparoscopy with dye test before plan of definitive operation. Patients were sub-divided into two groups- group A (only endometriosis, $n = 486$, 67.5%) and group B (endometriosis with other factors, $n = 234$, 32.5%). Pre-treatment for 3 months was done in 215 patients with Danazol ($n = 53$, 24.65%) or Gonadotrophin releasing hormone analogue (GnRHA) ($n = 162$, 75.34%). Direct surgery without any pre-treatment was done in 505 women. Operative modalities used were laser (143), bipolar electrosurgery (180) and high-frequency ultrasound energy (Harmonic Scalpel TM) (397). Operative procedures comprised of adhesiolysis, desiccation or vaporization of endometriosis and excision of endometrioma. Major surgical complication occurred in six patients (0.83%). Patients were followed up for at least 1 year to detect pregnancy and disease recurrence and to monitor QOL improvement.

Results: The pregnancy rate in age group 23–35 years with isolated endometriosis was 38.6% and take home baby rate of 34.8%. Seventy-eight percent occurred within 12 months of operation and a rest 22% in the next 12 months. In the group B is 15.38%. Overall pregnancy rate in patients with pre-treatment (30.69%) is comparable without it (31.03%). Electrosurgery, laser and Harmonic Scalpel had a comparable success rate. Five hundred and sixty-six (78.61%) patients felt a significant improvement in QOL with the surgical or combined modality of treatment. Second look laparoscopy was done in 76 patients. Ninety-six patients were referred for in vitro fertilization.

Conclusions: Laparoscopic conservative surgery with or without pre-treatment is an effective management for subfertility due to advanced endometriosis in terms of pregnancy outcome and improved QOL. Take home baby rate of 34.8% is comparable to result of any reputed IVF center. Improvement of quality of life in 85% of women is an additional advantage over ART treatment. Serious adverse effect of laparoscopic surgery is definitely a concern amongst gynaecologists.

FC2.12

Is sexual dysfunction common among pregnant Malaysian women?

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Background: Sexual function is known to diminish over the course of pregnancy due to physical and physiological reasons. Socio-demographic factors may also contribute to sexual dysfunction during pregnancy.

Objective: To determine the prevalence of sexual dysfunction among pregnant Malaysian women and determine the socio-demographic factors associated with it.

Methods: This was a cross-sectional study conducted on a group of pregnant women attending the antenatal clinic of Hospital Raja

Permaisuri Bainun Ipoh, at all stages of their pregnancy. Subjects were selected using the non-randomised sampling method. Exclusion criteria included age <18, single mothers with no live-in partners or those undergoing termination of pregnancy.

Instruments used included a questionnaire on socio-demographic data and the validated semi-structured Malay Version Female Sexual Function Index (MVFSFI) to assess sexual functioning. This questionnaire contains 19 questions and categorizes sexual dysfunction in the domains of desire, arousal, lubrication, orgasm, satisfaction, and pain.

Results: A total of 175 eligible subjects who gave consent were recruited into the study. Their mean age was 31 (SD 4.9) years with a mean gestational period of 26.8 (SD 6.9) weeks. Majority of the subjects were Malays (80%), had at least a secondary school level of education (97%), primigravidas (41%) and in their third trimester of pregnancy (55%). Most of them had been married for <6 years (61%) and almost all (98.3%) described their marriage as 'happy' and their current pregnancy as 'planned' (74%). The prevalence of sexual dysfunction among the subjects was about 37%. Types of sexual dysfunction experienced were low sexual desire (35%) and problems with arousal (25%), lubrication (28%), orgasm (21%), satisfaction (30%) and pain (23%).

Conclusion: Most of the pregnant women were primigravidas in their third trimester of pregnancy, Malays, in their thirties and well-educated. More than a third (37%) of them experienced sexual dysfunction despite mostly having a 'happy' marriage. Lack of sexual desire was the most common dysfunction among them.

FC2.13

Effect of endometrial injury on subsequent pregnancy rates in women undergoing IVF after previous implantation failure: systematic review and meta-analysis

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Objective: To estimate the effectiveness of endometrial injury by either hysteroscopy or biopsy caused before embryo transfer, in improving pregnancy rates for women undergoing IVF after previous implantation failure.

Methods: Data sources: A systematic review of electronic databases including Pubmed (Medline), Embase and Cochrane without restriction of language or publication date. Study selection: RCTs comparing endometrial injury by either hysteroscopy or biopsy versus no intervention for patients undergoing IVF on subsequent pregnancy rates were included. Data analysis: All pooled analyses were based on random effect model. Six RCTs involving 1409 participants met the inclusion criteria.

Results: Live birth rates reported in two studies were higher in the groups that had endometrial injury in the luteal phase OR = 2.22; (95% CI 1.44–3.42) and in one study where the injury was in the early part of the IVF cycle OR = 2.40; (95% CI 1.09–5.27). On-going pregnancy rate, reported in another study where

endometrial injury was performed during egg collection, was higher in the non intervention group OR 0.26; (95% CI 0.10–0.65). Clinical pregnancy rate (CPR) was reported in all six studies. In four of these, where endometrial injury was in the luteal phase of cycle preceding IVF, the CPR was higher in the intervention group OR = 2.16; (95% CI = 1.62–2.89). In two heterogenous studies, where endometrial injury was done in the follicular phase of COH cycle, CPR was not significantly affected OR = 0.84; (95% CI = 0.1–6.61).

Conclusions: Our study suggests a doubling of pregnancy rates when endometrial injury is performed in the luteal phase of menstrual cycle preceding repeat IVF treatment. No such benefits were demonstrated when performed in the IVF treatment cycle, particularly if during oocyte retrieval.

FC2.14

Islamic perspectives in counselling muslim patients with disorders of sex development (DSD) with gender-related issues

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Objective: This presentation is to raise awareness amongst medical personnel involved in the care of Muslim patients with DSDs of gender-related issues as pertaining to transgenders and hermaphrodites (khuntha) according to Islamic law and principles.

Methods: Gender assignment of patients with DSDs are complicated and require a multidisciplinary approach. Apart from involving medical specialists, patients and their family members, religious authorities should also be included as part of the team in communities where religion plays a big part in the daily life of an individual. This presentation will present discussions and issues raised by both Islamic and Western authorities on the definitions of gender, gender roles and hermaphroditism, Islamic perspectives with regards to transgenders or hermaphrodites (khuntha) on issues of prayers, position in the mosques, female privacy, inheritance rights and bathing rituals after death as well as current fatwas addressing patients with Congenital Adrenal Hyperplasia (CAH) and Androgen Insensitivity Syndromes (AIS).

Results: Out of 104 female patients with CAH followed up at UKMMC, 66% are of the Muslim faith. One has requested for gender reassignment from female to male and several others are showing signs of problems with gender identity and gender role behaviour. Hence, knowledge on Islamic perspectives of gender roles and related issues are significant in the counselling of these patients and their families. In Islam, hermaphrodites or khuntha is defined as a person

who has both male and female organs, or one who has neither. There are two types of khuntha: khuntha wadhah (discernible) and khuntha musykil (intractable). Examples of khuntha musykil are patients with CAH and AIS. The recent fatwa ruled that it is permissible for these two groups to have gender assignment surgery. The different schools of law in Islam (Hanafi, Maliki, Shafi'i and Hanbali) have different opinions on inheritance shares for the khuntha and the bathing rituals of their bodies following death. These schools agree on the middle positioning of the khuntha between the males and females during prayers in the mosques and that the khuntha cannot lead prayers as imams.

Conclusions: Medical personnel, especially of those of the Muslim faith, who are involved in the care of Muslim patients with DSDs need to be aware of the Islamic perspectives of gender-related issues and involve expert religious authorities in the counselling of these patients in order for a more holistic care.

FC2.15

The quality of life of adolescents with menstrual problems in Klang Valley **Uma, M; Nur Azurah, AG; Ani Amelia, Z; Mahdy, ZA; Grover, S**

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Background: Menstrual disorders are common among adolescents and may lead to physical and psychosocial dysfunction, hence may affect school performance. Despite the high prevalence of menstrual disorders, very few papers have addressed the health related quality of life (HRQL) among these adolescents.

Objective: The aim of the study is to determine the prevalence of menstrual disorders among adolescents in the Klang Valley in Malaysia. It also aims to describe the quality of life scores among adolescents with menstrual problems and identify predictors of low quality of life scores in adolescents with menstrual problem including clinical, demographic and socio-cultural predictors

Methods: This was a descriptive, cross sectional study conducted in secondary schools in the Klang Valley from June 2010 to June 2011, involving 729 girls. The research tools include part of the Menorrhagia Questionnaire and Paediatric Quality of Life-Teen Report 13–18.

Results: A total of 729 young girls completed the questionnaire. The participants' age ranged from 13 to 19 years old. The mean age for menarche in this sample population was 12.14 ± 1.11 years. More young women experienced irregular menses (52%) compared to regular menses (48%). About 29.2% of the girls had heavy menses, 49.9% had moderate to very severe dysmenorrhoea and 5.1% had oligomenorrhoea. The mean PedsQL total score for the sample population was 73.05 ± 13.78, Physical Health Summary Score was 76.11 ± 16.65 and Psychosocial Health Summary Score was 71.41 ± 15.21. Menorrhagia alone contributed to lower physical score compared to dysmenorrhoea and oligomenorrhoea. Adolescents experiencing menorrhagia together with dysmenorrhoea had the lowest emotional function. Those with oligomenorrhoea had the lowest social function whereas those with dysmenorrhoea had the lowest

school function. Cigarette smoking, alcohol and medical illness were associated with negative relationship with teen HRQL whereas taking oral contraceptive pills for menstrual problems was associated with higher scores in these adolescents.

Conclusion: Menstrual dysfunction among adolescents has a significant impact on a young women's quality of life. Each menstrual problem affects each domain differently. This calls for a more comprehensive approach towards managing our adolescents with menstrual problems. It is recommended to screen students at the school level, to identify girls with low functional scores and to refer them for proper management at a tertiary adolescent gynaecology centre.

FC2.16

The outcome of primary repair in third and fourth degree perineal tears

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Objective: To determine the outcome of primary repair in all cases of third and fourth degree perineal tears.

Study design: Retrospective observational study, including all 57 women who had a third or fourth degree perineal tear from February 2006 to August 2009.

Setting: Izzat Ali Shah female Hospital, Wah Medical College, Wah Cantt.

Methods: All women who had either third or fourth degree perineal tear during normal vaginal delivery were included in the study. Telephonic contact with all of these women, was tried and they were asked about symptoms of fecal, flatus incontinence and urgency.

Results: A total number of 57 patients were identified who sustained third or fourth degree perineal tear, out of 3067 vaginal deliveries making it 1.82%. We tried to contact all these patients on phone but only 36 (63%) women could be interviewed. The patients who had symptoms were 13 (36%). Flatus incontinence found in 10 (27%), flatus urgency in 6 (16%) and faecal incontinence in 6 (16%).

Conclusion: Anal sphincter damage is associated with long term morbidity in the form of fecal incontinence affecting a women's quality of life and have psychological effects even measures should be taken to identify such tears and to do optimum primary repair with proper written plan for follow up. The follow up can be done at a dedicated perineal clinic with trained staff and equipment available.

FC2.17

More HIV infections among housewives than sex workers in Malaysia

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Objective: From the year 1986 to June 2009 there were 551 sex workers infected with HIV but the numbers among housewives were 2,865 (1). The objective of this study was to analyse the reasons and remedy to this scourge.

Methods: This is the retrospective study of the reports of Malaysian AIDS Council, Ministry of health and other related institutions

Results: The infections had steadily increased among the females. In the year 1990 the male infection was 98.85% and female infection was 1.15%. However in the year 2008 the male infection was 80.94% and the female infection was 19.06%. Sharing needles (injecting drug users) is the commonest form of transmission and the second common mode was sexual transmission. Out of the 86 127 cases 61 123 were injecting drug users and 16 040 transmission through sexual contact. Although the total number of HIV cases among housewives appears to be greater than sex workers in Malaysia, this is mostly due to the high prevalence of HIV among IV drug abusers. The Malay men are the highest number of IV drug abusers in Malaysia. Thus, it is coherently possible that, the housewives contracted the dreadful disease from their respective husbands who are IV drug abusers, instead of the norm perception of the husbands are involved in illicit sexual contacts with sex workers who are HIV positive. Most sex workers are aware of HIV infections and the mode of transmission. They ensure use of barrier methods when servicing their clients. It is also possible that most sex workers do not have the financial means to seek medical attention as frequently as the housewives do, due to their predisposition. Most of the sex workers are either from poor foreign countries or illegally smuggled in. This renders the statistics unreliable. The prevalence among sex workers are under reported.

Conclusion: Most of the victims are not aware the mode of transmission and prevention of disease. The HIV infection among sex workers are not very high since they follow proper health guidelines. The housewives are mostly infected by their husbands. The chance of infection from man to woman is much higher than woman to man. Men should understand that one woman in many position is much safer than many women in one position.

FC2.18

Endometrial thickness and pattern assessed at time of oocyte pickup (OPU) as a predictor of pregnancy after ICSI

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Introduction: Endometrial receptivity is important in *in-vitro* assisted conception whereby the endometrial thickness and pattern are assessed at time of human chorionic gonadotrophin (hCG) administration. However, it is impossible at all times as some patients are triggered 1 or 2 days after the last scan.

Objective: To ascertain the value of endometrial thickness (ET) and pattern assessed at time of OPU as a predictor of pregnancy after intracytoplasmic sperm injection (ICSI).

Methods: A retrospective review of the ET and pattern of patients who underwent ICSI at Sunfert IVF, between 2009 and 2011 was performed. The maximal ET was assessed using longitudinal transvaginal ultrasonography at the time of OPU and patients were divided into the following groups. Group A (ET < 8 mm), Group B (ET 8–12 mm) and Group C (ET > 12 mm).

Concurrently, endometrial pattern was also assessed and divided into Pattern I (trilaminar), II (isoechogenic) and III (hyperechogenic). The embryo implantation rate (EIR), clinical pregnancy rate (CPR) and miscarriage rate (MR) were analysed. **Results:** A total of 335 couples had ICSI and the women's mean age was 35.0 ± 4.21 years. EIR was highest in Group C (35.1%), subsequently Group B (26.8%) and Group A (26.1%). CPR was the highest in Group C (57.5%), subsequently Group B (47.8%) and Group A (41.7%). MR was highest in Group A (20%) subsequently Group B (14.8%) and Group C (11.9%). Overall, EIR, CPR and MR did not show significant differences in all groups ($P = 0.081$, $P = 0.220$ and $P = 0.740$) respectively. EIR was highest in Pattern I (35.1%), subsequently Pattern II (26.7%) and Pattern III (28.2%). The CPR was highest in Pattern I (56.3%), subsequently Pattern II (46.0%) and Pattern III (49.5%). The MR was highest in Pattern I (27.8%), subsequently Pattern II (15.0%) and Pattern III (12.1%). Generally, EIR, CPR and MR did not show significant differences in all groups ($P = 0.081$, $P = 0.604$ and $P = 0.219$) respectively. **Conclusion:** ET more than 12 mm showed a higher EIR and CPR and a lower MR. A trilaminar pattern at the time of OPU showed a higher EIR and CPR presumably due to lack of premature rise in progesterone during controlled ovarian stimulation. An isoechogenic pattern could be the most optimum pattern for the best outcome.

FC2.19

The effect of maternal body mass index on preterm birth in women referring to health centers of Ardebil in 2010: prospective study

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Objective: To evaluate the relationship between prepregnancy maternal body mass Index (BMI) and preterm birth.

Methods: This study included 231 healthy pregnant women, without any risk factors of preterm birth, were classified into categories that were based on their body mass index. Association between BMI, weight in 28–32 week of pregnancy, gestational age in birth and rout of delivery were examined. Rates of preterm birth were compared.

Results: In each BMI category, the percent of women who delivered a preterm infant was underweight 3.8%, normal 46.2%, overweight 7.7%, and obese 42.3%. There was not significant relationship between body mass index and preterm ($P > 0.8$). Obese women had larger infants but there wasn't significant relationship ($P > 0.7$), and had more frequent caesarean delivery (OR = 3.21, 95% CI = 1.74–5.92) $P = 0/006$). Weight in 28–32 weeks during pregnancy is poorly correlated with prepregnancy BMI ($P = 0/4$) and preterm birth.

Conclusion: In this survey, there wasn't significant correlation between body mass index (BMI) before pregnancy and preterm labor <37 completed weeks and we suggest more study for evaluation between preterm labor mechanism in obese and non obese women.