Poster presentations

PP.001
'The baby shot out': short second stage of labour as a risk factor for obstetric anal sphincter injuries (OASIS)
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Objective: To determine whether short second stage of labour can be associated with OASIS.

Background: Prolonged second stage of labour is a recognised risk factor for OASIS. Other risk factors, e.g. epidural analgesia and forceps delivery, are usually associated with prolonged second stage. Little is documented about association with short second stage.

Methods: Retrospective case notes review for 149 patients attending the Perineal Clinic between September 2009 and February 2013. Second stage duration was stratified into 15 minutes intervals. Distribution of OASIS was analysed accordingly.

Results: Duration of second stage ranged from 3 to 392 min (median: 53 min). The incidence of OASIS peaked (45%) at <45 min (Figure 1). Seventy six percent of OASIS occurred with spontaneous vaginal delivery, 61% did not have epidural, and only 11% had episiotomy.

Table 1. Patient demographics

<table>
<thead>
<tr>
<th>Median</th>
<th>Range</th>
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<tr>
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<tr>
<td>BMI</td>
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<td>Parity</td>
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Conclusion: ‘Quick’ delivery is a risk factor for OASIS. This may be due to less time for vaginal accommodation and perineal protection by the accoucher. We suggest a second stage of <45 min as a risk factor for OASIS. Significant reduction in the incidence of OASIS can be achieved by slowing delivery of fetal head, perineal support, and appropriate use of episiotomy which can be particularly useful in cases with short second stage.

PP.002
A 10-year retrospective review of gynaecological laparoscopic injuries at a district general hospital trust
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Objective: To determine gynaecological laparoscopic complication rates over a 10-year period and classify complications.

Background: Each year 250 000 women undergo laparoscopic surgery in the UK. The risk from all complications of laparoscopic surgery is 1/1000 to 12.5/1000. Serious complications occur in 1/1000 cases. Bowel injury is 0.6–1.13/1000, urological injury 0.3–2.5/1000, and vascular injury 0.1–1.05/1000. Operative laparoscopy is associated with the highest rates of injury.

Methods: A review of gynaecological laparoscopic injuries in a district general hospital over a 10-year period from January 2003 to December 2012 was conducted. Data sources included SEMAHelix Hospital Database, Gynaecology Complications Register, Clinical Governance Records, Complaints and Legal Cases. Complications were classified into three categories: diagnostic, sterilisation and operative laparoscopy, and further classified into major and minor complications and type of injury (bowel, urological, vascular and other).

Results: There were 5130 gynaecological laparoscopic procedures performed, after 76 incorrectly coded procedures were excluded. Twenty-six ‘true’ complications were recorded after excluding four cases; three were ‘incorrectly recorded’ and one was ‘not documented’. The total complication rate was 5.1/1000. Diagnostic complication rate was 3.6/1000; laparoscopic sterilisation complication rate was 10.8/1000; operative laparoscopic complication rate was 3.1/1000.

Conclusions: The total complication rate of 5.1/1000 was below the national standard of <12.5/1000 procedures. Our highest complication rates were in the laparoscopic sterilisation group; however, the majority of these were ‘minor’ complications. Furthermore, our operative laparoscopy injury rates were much lower than national standards. Rates of major complications were

Figure 1.
comparable to current literature; minor complications were lower than rates reported in the literature.

PP.003
A case of a missed cerclage, an unusual cause of postmenopausal bleeding
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Background: Cervical cerclage has been used in the management of cervical insufficiency and prevention of preterm delivery since it was first reported in 1955. There is a plethora of evidence as to the placement and outcomes of cervical sutures and transabdominal cerclage is emerging as a mainstay of treatment. Currently, an abdominal cerclage may be applied and remain insitu until the patient reports a pregnancy and the family is completed or complications dictate removal. This leaves a proportion of women who never conceive and may retain the suture indefinitely.

Case: The woman, a 77-year-old multiparous (gravida 5, para 3), presented at clinic with a 3-month history of postmenopausal bleeding. She gave an obstetrical history of recurrent miscarriage and cervical insufficiency managed by cerclage and reached menopause at 52 years of age. On examination, the patient was found to have an outward erosion of the remnants of a shirodkar suture that was later removed under general anaesthetic. The patient re-presented again with bleeding 2 years later and a further portion of the suture was discovered to be causing additional erosion.

Discussion: Current guidance with regards to the management of cervical cerclage offers no comment as to further management of sutures post LCSC. There is some literature describing the long term complications of retained cervical sutures such as cervico-vaginal fistula, bladder complications and uretero-vaginal fistula. In reporting this unusual case of postmenopausal bleeding we bring to light another consequence of cervical sutures.

PP.004
A case of caesarean scar ectopic pregnancy – successful treatment with intra-amniotic methotrexate followed by a systemic course of intramuscular methotrexate
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Case: A 34-year-old woman, G5 P2 was seen at the Royal Derby Hospital in early pregnancy. Previous deliveries were by emergency caesarean section, the first at 30 weeks of gestation for a ruptured uterus and the second at 34 weeks for placenta praevia. Ultrasound scan showed a live pregnancy of 6+1 weeks with the gestation sac deeply embedded in the caesarean section scar. Myometrium could not be seen on the outer surface of the uterus and the pregnancy was closely applied to the bladder wall. A complete pregnancy percreta through the old scar was diagnosed. Although asymptomatic, the patient was offered termination of the pregnancy and a review of the literature was undertaken to decide how to safely manage the case. The patient initially underwent uterine artery methotrexate infusion via femoral catheters and embolization, however this was unsuccessful and a fetal heart was still present 7 days following treatment. After further counselling, the patient underwent intra-amniotic methotrexate and intra-cardiac lignocaine into the pregnancy, followed by alternate day intra-muscular methotrexate over 1 week, with alternate day folic acid. The treatment was successful and the patient went home 8 days after the initial treatment with falling β-hCG levels.

Discussion: The diagnosis of a complete pregnancy percreta through an old scar highlighted considerable risks for this patient. These included severe retro-vesical bleeding that would most likely require surgical resolution with the loss of the uterus and possible bladder damage. A number of problems may have been encountered if the pregnancy had continued, for example, severe placental insufficiency due to abnormal vascular supply, very pre-term delivery or intra-uterine demise. There was the risk of retro- or intra-vesical severe haemorrhage, and the likelihood of caesarean hysterectomy with bladder involvement as well as the risk of maternal loss of life due to uncontrollable haemorrhage, particularly after 20 weeks of gestation.

PP.005
A case of severe thrombocytopaenia and anaemia in pregnancy: the legacy of a deficient diet
Gundry, R
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Objective: (i) To present an unusual case of thrombocytopaenia and severe anaemia secondary to malnutrition. (ii) To highlight the importance of considering other haematinic deficiencies besides ferritin in women presenting with anaemia in pregnancy.

Case: A caucasian woman of 35 weeks of gestation with normal BMI was found to have thrombocytopaenia (plt:41), severe macrocytic anaemia (Hb:5.9, MCV:102) and IUGR in the absence of pre-eclampsia. Further testing identified severe folate and milder B12 deficiency with normal ferritin (taking iron supplements). Her obstetric history included two births of growth-restricted babies during which the same haematological pattern was observed. Her booking haemoglobin had been normal (13.4).

Management: Joint management by obstetric and haematology teams included blood transfusion, B12 injection, folic acid supplementation and antenatal steroids. Induction of labour resulted in the birth of a 1.9 kg baby with normal APGAR scores.
Follow-up postpartum with ongoing folic acid and B12 supplementation showed gradual normalisation of platelet and haemoglobin levels, and further investigation cited malnutrition as the major cause of the haematological abnormalities.

**Discussion:** Folate and B12 are essential for DNA synthesis. While low levels are unusual in healthy individuals, in pregnancy rapid cell division can unmask chronic malnutrition. Folate and B12 are also critical in the metabolism of homocysteine. Elevated homocysteine may be implicated in the pathogenesis of placental dysfunction. Dietary deficiencies are a recognised feature of obesity and socioeconomic deprivation. The finding of anaemia in this population should alert clinicians to the possibility of folate and B12 deficiency.

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**PP.006**

**A case of solitary axillary metastasis from primary endometrial cancer**

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**Background:** Endometrial carcinoma usually spreads by local invasion to the ovaries and surrounding tissues, and by lymphatic vessels to the pelvic and para-aortic lymph nodes. Distant solitary metastasis to the axilla (without concomitant breast carcinoma) is a most unusual finding without local abdomino-pelvic recurrence.

**Case:** A 46-year-old woman underwent a TAH, BSO and omentectomy for grade 2 stage 1A endometrial adenocarcinoma for irregular vaginal bleeding and diagnosis of endometrioid adenocarcinoma with a focus of clear cell carcinoma on endometrial biopsy. One year later she presented to the breast surgeons with a 4 week history of a painful axillary lump having had normal gynaecological follow-up in the preceding year. She did not have any other risk factors or medical co-morbidities. Biopsy of the lump demonstrated an axillary lymph node with clear cell metastatic endometrial carcinoma, which revealed similar histological characteristics when compared to the initial endometrial biopsy. CT and PET scans failed to show any evidence of local site recurrence. She then proceeded to have formal chemotherapy for treatment of her axillary disease recurrence.

**Conclusion:** This is the first published case of solitary secondary lymph node metastasis to the axilla in a primary early stage endometrial cancer without any local metastasis or a history of breast cancer. Therefore, distant site metastasis to the axilla although rare, can occur in endometrial clear cell carcinoma without any evidence of local recurrence.

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**PP.007**

**A case of steroid associated postpartum psychosis**

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**Case:** We report a case of acute postpartum psychosis in a young woman with no previous psychiatric history. There is an established association of occasional psychiatric symptoms with corticosteroid therapy. Severe psychosis is rare and to the best of our knowledge this is the first reported case of postpartum psychosis following steroid therapy.

A 33-year-old primigravida with an uneventful antenatal period presented in spontaneous labour. Emergency caesarean section was performed for failure to progress. Postoperatively, she had itching and was prescribed antihistamine medication. As the itching persisted, she received an intravenous dose of 2 mg dexamethasone and 2 hours later she was also prescribed 100 mg hydrocortisone. She also received a single dose of 10 mg nifedipine for raised BP. Later that evening, she started getting agitated. She appeared paranoid about the actions of staff members and her husband. She attacked staff members with a pair of scissors and locked herself in the room with her baby. Lorazepam and haloperidol were administered and she was transferred to the mother and baby unit. She did not require further antipsychotic medications and made a swift recovery.

**Discussion:** The literature regarding psychiatric adverse effects of steroids is mainly based on case reports with few clinical studies. A review of cases suggested the incidence of serious psychiatric adverse effects following steroid therapy is about 5%. Our patient had no previous history of psychiatric symptoms and her symptoms swiftly resolved. Severe postpartum psychosis usually has a period of convalescence. Her rapid recovery makes it more likely that this was an episode of substance related psychosis. It is important that clinicians in all disciplines are aware of the psychiatric effects of steroid therapy so that such cases can be recognised and managed appropriately. The diagnosis also has implications for future counselling in cases of postpartum psychosis.

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**PP.008**

**A case presentation of an unusual ovarian tumour – a malignant brenner tumour with a co-existing mature cystic teratoma**

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**Background:** Ovarian tumours can be categorised according to their cell of origin. They can also be classified as benign, borderline or malignant. However, not all ovarian malignancies behave in the same way and an accurate histological diagnosis is therefore essential for planning appropriate treatment and follow-up for patients.
Current literature is unclear regarding tumour prognosis and regimen and benefit of adjuvant therapy remains unknown. The mainstay of treatment is surgical resection but the exact no established tumour marker for malignant Brenner tumours. Due to their rarity and variable histological criteria, there is thrombomodulin and cytokeratin 7 and negativity to cytokeratin staining often demonstrates positivity for uroplakin III, benign, with only 1% being malignant. Immunohistochemical invasive epithelial ovarian cancer. Most Brenner tumours are are managed by ureteroneocystostomy; injuries haemostasis. Injuries within 4 cm of the ureterovesical junction uterine segment or the vagina, and attempts to achieve ligation associated with uterine incision extensions in the lower section. It is attributable most often to ureteral transection or 6 PP.009 A case report of bladder repair with right to left ureteroureterostomy, left sided ureteric reimplantation and psoas hitch following caesarean section Smitharaghavan, MV; Arutchelvam, S; Roy, S North Tees and Hartlepool NHS Foundation Trust, United Kingdom Background: Ureteral injury is a rare complication of caesarean section. It is attributable most often to ureteral transection or ligation associated with uterine incision extensions in the lower uterine segment or the vagina, and attempts to achieve haemostasis. Injuries within 4 cm of the ureterovesical junction are managed by ureteroneocystostomy; injuries >4 cm, by ureteroureterostomy. Case: A 38-year-old primipara, with known Ulcerative colitis on Mesalazine was booked under consultant care. She had an uneventful pregnancy and admitted at 39+2 weeks in spontaneous labour. She underwent class 2 caesarean section for failure to progress. During the procedure, the bladder was over distended and there was an extension of left angle towards the bladder by 2–3 cm. Urine was found to be heavily blood stained at the end of the procedure and methylene blue test was done to check the bladder integrity. A tear at the bladder base was recognised. The bladder injury was repaired by Urologists and a cystoscopy was performed to check ureteral integrity. Bilateral ureteric blockage was identified following intraoperative urogram and a decision was taken to perform ureteric reimplantation. It was a technically difficult procedure due to postpartum uterus. The right ureter could not be implanted into the bladder due to shortage of length. Right to left ureteroureterostomy was carried out by bringing the right ureter under sigmoid mesentery in retroperitoneum, via submucosal tunnel. Implantation of left ureter into bladder base was performed. Ureteric stent was inserted and she had catheter insitu for 10 days. She had an uneventful postoperative recovery. Cystogram at 10 days revealed no leak.

Conclusion: Cystotomy, when adequately repaired, is not associated with any complications. Furthermore, diagnostic cystoscopy with intravenous injection of indigo carmine is a rapid, safe method of evaluating ureteral patency. Immediate recognition of accidental ureteral injury provides optimum results.

PP.010 A case report of pemphigoid gestationis: how to successfully diagnose and manage the condition Bobdiwala, S; Ovadia, C West Middlesex University Hospital NHS Trust, London, United Kingdom Case: We report the case of a 40-year-old woman in her second pregnancy, who presented at 24/40 with a pruritic rash consisting of large, intact blisters and urticarial erythema (Figure 1). She remained systemically well.

Basic biochemical investigations at the presentation of the rash were normal. The diagnosis of pemphigoid gestationis was confirmed by biopsy; in this case punch biopsy of a bullous lesion confirmed bullous pemphigoid. Due to the risks of IUGR associated with the condition, the patient underwent serial growth ultrasound scans of the fetus which demonstrated all fetal biometry to be above the 97th centile. Her glucose tolerance test was normal.

The patient was commenced on 30 mg of oral prednisolone daily, with weekly review of her capillary blood glucose due to the associated risk of developing gestational diabetes mellitus (GDM). She responded well to steroid therapy (Figures 2 and 3) and did not develop GDM. She had IV hydrocortisone in labour to prevent an Addisonian crisis following the use of exogenous corticosteroids. The fetus was born in good condition and had no dermatological problems. At review 6 months postnatally, the patient had stopped taking her steroids for 6 weeks and had no flares.

Figure 1. Intact blisters and urticarial erythema on the left arm.
Discussion: Pemphigoid gestationis is a rare (1:50 000) but important dermatological complication of pregnancy. Women who develop the condition need to be managed by both a dermatologist and obstetrician. Potential maternal and fetal side effects of the condition as well as its treatment (particularly steroid treatment) need to be monitored for and carefully explained to the patient. A clear plan for the management of labour should be documented by a senior obstetrician. Postnatal counselling should include discussion of the risk of recurrence with re-establishment of menses, with the use of the combined oral contraceptive pill and with future pregnancies.

Case: A 30-year-old female presented with primary amenorrhea with normal secondary sexual characters due to abnormality of the pituitary-ovarian axis and has hormonal levels indicating premature ovarian failure with no obvious cause- hormonal, genetic, syndromic or any medical disorder or problem. Again she has an isolated rudimentary uterus with no other anatomical abnormalities in renal or skeletal system.

Investigation: She had been investigated for her hormonal profile which showed high FSH (60 IU) and LH (23 IU) and low estradiol (<37 pmol/L) level. TSH, androstenedione, SHBG and free testosterone were all within normal limits. Karyotype was XX female. USS of abdomen showed rudimentary uterus measuring 3 cm in length and with a thin endometrium of 0.7 mm. Right ovary was seen but left ovary was not distinctly seen. Renal USS was normal. Other investigations were not offered as that would not change the treatment plan or resolve infertility problems.

Summary: A 30-year-old, sexually active woman presented with primary amenorrhea with normal secondary sexual characters and no hirsuitism or hyperandrogenism or galactorrhea. Hormonal assay showed low estradiol and high FSH and LH and USS showed a rudimentary uterus with a normal right sided ovary. Karyotype showed XX. Treatment with combined estrogen and progesterone led to cyclical withdrawal bleed but prospects of pregnancy are poor due to rudimentary uterus.

A commonly missed uncommon cause of postoperative bradycardia
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Background: Postoperative bradycardia is commonly caused by medication or a parasympathetic response following an intraperitoneal bleed. It is rarely due to endocrine abnormalities. This case demonstrates a well-described phenomenon presenting in unfamiliar surroundings.

Case: We present a case of a 37-year-old female who underwent laparoscopic subtotal hysterectomy for long-standing history of menorrhagia after failure of medical management. She had no significant medical history and was deemed fit for surgery following normal parameters in pre-assessment clinic. Postoperatively, she developed severe bradycardia, which led to cardiovascular compromise and reduced consciousness. After initial investigations failing to reveal the cause, she was surprisingly found to have a TSH of 295.1 mU/L units (normal: 0.4–5.5) and a free T4 of 1.9 pmol/L (normal: 11.5–22.7). A diagnosis of myxoedema crisis was made. She was successfully treated with intravenous thyroxine and discharged a week later on oral thyroxine.

Discussion: Hypothyroidism is a common cause of menorrhagia with a prevalence rate of up to 2% and is ten times more common in women compared to men. Myxoedema crisis is the most severe form of hypothyroidism usually precipitated by factors such as surgery, severe illness, sepsis, burns, trauma and
medications, often in patients who are undiagnosed and hence untreated for hypothyroidism. Mortality from myxoedema crisis can be as high as 60% if it is not diagnosed and treated promptly. Management includes rapid replacement of thyroid hormones, treatment of precipitating cause and mechanical ventilation in some cases. Gynaecologists seldom deal with endocrinological emergencies and this can lead to a delay in the diagnosis of a seemingly common condition. This case highlights the need to adopt a high index of suspicion for thyroid abnormalities in patients who present with intractable menorrhagia and those who develop unexpected cardiovascular, respiratory or neurological compromise following surgery, as deranged thyroid function can be potentially life-threatening.

PP.013
A new aetiology for OAB: intracellular bacterial colonisation of urothelial cells
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Objective: We tested the hypothesis that uropathogenic bacteria colonise urothelial cells in patients with overactive bladder (OAB) symptoms.

Background: Recent studies in OAB have identified the frequent occurrence of urinary inflammatory exudates, although routine urinalysis proves insensitive in detection. There are reasons to suspect a chronic intracellular bacterial infection as the culprit in this pathology.

Methods: We studied 23 women, mean age 56 (SD = 17); 16 had OAB symptoms and provided a CSU; 7 asymptomatic female controls, average age 29 (SD = 12), provided a CSU. Urine was examined immediately by microscopy and the urinary white cells evaluated. An aliquot of urine was sent for routine culture with a threshold of 105 cfu/mL. An intracellular invasion assay on the shed epithelial cells was performed and species were identified by 16s-rRNA typing. In a follow-on experiment the method was repeated in another sample of 26 patients and eight controls using chromogenic agar, providing immediate species identification. The statistical analysis of the data was conducted using one-way analyses of variance (ANOVA) and 95% confidence intervals.

Results: 26/49 (53%) of the OAB samples showed evidence of intracellular bacterial colonisation of the bladder epithelium and only 2/15 (13%) of the control specimens showed the same. The average colony counts post cell lysis were 1 x 10⁶ cfu/ml in patients. In the two positive control volunteers, these counts were ≤10³ cfu/ml so that the difference was five orders of magnitude, ie 10⁵ (F = 5.668, df = 1, P = 0.027). The dominant bacteria in this sample of patients was Enterococcus faecalis, Streptococcus agalactiae, Streptococcus anginosus, Escherichia coli and Proteus mirabilis.

Conclusion: This is the first time that evidence for intracellular bacterial invasion of urothelium in patients with OAB has been shown. Intracellular colonisation is a known mechanism by which bacteria evade host immunity and antibiotic treatment allowing long-term persistence.

PP.014
A pilot of a practical basic obstetric ultrasound training programme – are we finally getting there?
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Objective: The difficulties in providing practical ultrasound training for obstetrics and gynaecology trainees have been an ongoing training issue. A practical ultrasound training programme at a tertiary level hospital for 16 ST1–ST5 obstetrics and gynaecology specialist trainees was piloted.

Methods: An ultrasound training programme was developed in line with the RCOG basic ultrasound training curriculum. All trainees were provided with theoretical and ultrasound safety training prior to attending a clinical session. The ultrasound training was incorporated into the trainees’ weekly timetable and consisted of three one-to-one half-day sessions with one of two trainers; a senior ultrasonographer or fetal medicine consultant. A dedicated training list was arranged and this teaching time was protected. The trainees scanned approximately six cases per session. Following these sessions, they were assessed by a fetal medicine consultant over three–four cases, given feedback on their progress and signed off in their RCOG logbook if the appropriate standard of learning had been achieved. Six months into the training programme, trainees were sent an anonymised questionnaire regarding the uptake of the training opportunity, number of sessions attended and questions regarding subjective improvements in ultrasound knowledge and practical skills.

Results: There was very positive feedback from the trainees regarding the training programme. Trainees felt both knowledge and ability improved following training with 7/16 trainees completing the basic ultrasound training module. There was no significant difference in the number of training sessions required by trainees of different seniority to fulfil basic training requirements.

Conclusion: The pilot ultrasound training programme received positive feedback from trainees and successfully enabled 7/16 trainees to complete their RCOG basic ultrasound competency over a six month period. It is unknown how effective this training is in the long term. Trainees preference was for ongoing regular dedicated ultrasound training. Finding the resources to deliver basic and ongoing ultrasound training remains challenging.
PP.015
A rare and interesting case of familial aquagenic urticaria in obstetrics
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Objective: To report a very rare case of aquagenic urticaria presented in the antenatal clinic and review the literature regarding this condition.
Case: A 24-year-old primigravida presented in the antenatal clinic at 32 weeks of gestation. She described having allergic reaction to contact with water in the form of urticarial rashes (wheals), blisters and severe itching. She reported that the allergic response happens whenever she has any significant contact with water, in particular if she takes a shower or bath, regardless of the temperature or source of water. She developed the rashes even with her own sweat. Her mother and brother also had the same problem.
Discussion: Aquagenic urticaria is a rare form of physical urticaria, characterised by pruritic wheals that appear following contact with water, independently of its temperature. Methods were a case report and pubmed search.
Conclusion: The case was reviewed by a dermatologist, who advised high dose of anti-histamines. However, she did not respond very well to it. There were no significant implications in terms of obstetric management. She eventually delivered by caesarean section.

PP.016
A retrospective study of cervical screening in women under 25-years-old /2005–2009
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Objective: A retrospective study to analyse the safety of changing the starting age of cervical screening programme in England to the age of 25 years.
Background: Since 2003, when the age threshold of cervical screening in England has been raised from 20 to 25 years, there have been many calls to restore the previous starting age for cervical screening as there are concerns about the delaying of initiating cervical screening may result in an increase in cervical cancer.
Methods: A retrospective analysis of 426 women under 25 years, who referred with cervical smears taken at Bromley PCTs to the colposcopy clinic at Bromley Hospitals, between 2005 and 2009. The colposcopy findings and histology results were reviewed and analysed.
Results and conclusions: 44.8% of smears showed mild dyskaryosis, 23% and 12% were moderate dyskaryosis and severe dyskaryosis, respectively. Of 0.2% revealed glandular changes. On colposcopy; only 16.2% were normal, however, 25.8%, 20% showed low and high grade abnormalities, respectively. Twelve percent showed HPV-related changes. No suspected malignancy found. Colposcopic-directed biopsy obtained in 228 women. CIN1 found in 48%. However, 25% and 9% revealed CIN2 and CIN3 respectively. Glandular changes noticed in one case; 0.44%. Treatment performed for 130 women; (30.5%). The histological examination showed abnormalities in 91; 74.8% were CIN2/3. The glandular changes found in two cases (1.6%) and one case of micro-invasive cancer; 0.79% which comprises 0.23% of our sample. In view of the size and the heterogeneity of our sample, it is difficult to recommend changing the starting age of NHSCSP. However, we recommend having a low threshold to offer cervical cytology to the women under 25 on clinical basis, particularly, after the recent introduction of HPV triage, which will enable us to avoid the two main disadvantages of the early screening; over-diagnosis and over-treatment.

PP.017
A severe case of puerperal group A streptococcal sepsis
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Background: Sepsis is currently the leading cause of maternal death, with group A streptococcal (GAS) sepsicaemia accounting for approximately 42%. GAS infections, characterised by certain virulence factors, can present with few symptoms, but may deteriorate rapidly into multi-organ failure. Case reports and data from Public Health England suggest a recent increase in the number of severe cases, and a possible seasonal pattern of occurrence. Early recognition, intensive antibiotic and supportive therapy, with a low threshold to surgical intervention is essential. We report the most recent case from the University Hospital of North Durham with a review of the current literature.
Case: A 20-year-old primiparous lady delivered a healthy baby girl at home sustaining a labial tear. She was admitted overnight to labour ward and discharged the following day. Over the next seven days at home she complained of some gastrointestinal symptoms. Seven days later she was admitted to ITU via A&E in septic shock, requiring triple inotropic support. Blood cultures and swabs from admission confirmed Group A streptococcus, M-subtype 6. She was treated aggressively with IVI antibiotics and IV immunoglobulin. On day eight of this admission she was transferred to labour ward. She was discharged from post natal ward 11 days after that, 27 days after the birth of her daughter.
Conclusions: According to the literature this patient had key ‘predictors of death’ including gastrointestinal symptoms preceding deterioration, and respiratory involvement at time of hospitalisation. Fortunately, appropriate therapy was commenced early, and the patient was managed with multidisciplinary involvement. After a prolonged period of supportive treatment the patient recovered and was able to be discharged home. Although a precious resource, and not adequately supported by high quality trials, early use of immunoglobulin in such patients is believed to be of effect.
**PP.18**  
**A simple SMM: what could possibly go wrong?**  
*Raykova, T; Simons, A*  
St Richard’s Hospital, Chichester, United Kingdom

**Objective:** Drawing attention to all trainees performing SMM on everyday basis to be vigilant of all patients having previous caesarean section, in view of possible undiagnosed scar pregnancy, which may lead to complications such as major haemorrhage and hysterectomy.

**Case:** A 38-year-old woman with a history of caesarean section had an USS which showed heterogeneous area consistent with incomplete miscarriage. The patient was counselled and opted for SMM. The SMM was started as a routine procedure, when heavy bleeding and anterior uterine wall softness were noted; Syntocinon was started with nil effect. Profuse bleeding continued and SMM was taken over by the consultant. However, the total blood loss was about 2500–3000 mL. Foley catheter was inserted intra uterine and second consultant was called. Further 500 mL of blood loss led to the decision of TAH.

Overall EBL was 4200 mL. The patient was transferred to ITU post operatively and recovered completely.

**Discussion:** Pathology report confirmed morbidly invasive placenta percreta. Risk management review of the scan reports concluded that the placenta percreta could not have been diagnosed on the images reviewed. Materials were photos of the uterus during the hysterecemy and from the pathology reports.

**Conclusions:** The case illustrates how a simple SMM could lead to a significant event. Therefore, we need to counsel these patients regarding the risk of placenta accreta/percreta, haemorrhage and hysterectomy. In cases where preserving the uterus is important for women not completing their families, other options could be explored such as repeated USS for diagnosis of possible pregnancy implantation into caesarean scar visualising the defect within the anterior uterine wall or use of Shirodka suture in securing haemostasis.

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**PP.019**  
**A study on peripartum hysterectomy**  
*Puppala, SR; Singhal, T*  
University Hospitals of Leicester, United Kingdom

**Objective:** To assess the risk factors impacting on peripartum hysterectomies in a unique multiethnic population over the last 10 years (2003–2012).

**Background:** Leicester is a unique city with representation from all parts of the world. Peripartum hysterecemy is undertaken as a life saving measure in intractable obstetric haemorrhage. The UKOSS study established the national incidence of peripartum hysterectomy. We undertook this study to understand our local practice.

**Methods:** Retrospective analysis of medical records of all women who underwent peripartum hysterectomy in the last 10 years.

**Results and Conclusions:** Our incidence of peripartum hysterectomies is 2.7 per 10 000 women delivering which is much lower in comparison to the national incidence estimated by UKOSS as 4.1 per 10 000 women delivering. We attribute our lower incidence to the prompt actions and excellent team work of the midwives, obstetricians, anaesthetists, blood transfusion practitioners and the haematology department. We had 28 hysterectomies over the 10 year period. Medical records for five cases were missing. Majority were white British (14 [50%]), 5 were Asian, 2 were African, and 2 were of other ethnic origins. Nineteen were performed after caesarean section, eight were following elective caesareans out of which five were planned elective hysterectomies performed for morbidly adherent placenta. Three were following postpartum haemorrhage after elective caesareans, 11 were following emergency caesarean sections and four after vaginal delivery out of which one was after a vacuum delivery. The most common risk factor was previous caesarean section. The most common cause of intractable haemorrhage was from uterine atony and the most common complication was bladder injury. Two cases had a second laparotomy after hysterectomy for haemorrhage. There was one neonatal death and no maternal mortality. Three women had long term psychological sequelae and follow-up.

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**PP.020**  
**Acute confusion in pregnant patient**  
*Nisal, M; Singh, J; Nisal, K*  
University Hospitals of Leicester, Leicester, United Kingdom

**Background:** Severe hypothyroidism is known to affect 1–3 in 1000 pregnancies. However, severe hypothyroidism with neurological dysfunction in pregnancy has not previously been reported. Casey and Leveno state that ‘intellectual slowness’ can occur following progression of hypothyroidism. We present the first recorded case of proven neurological dysfunction due to hypothyroidism in a pregnant female.

**Case:** A 13 week pregnant 21-year-old female presented with a 2-day history of non-communicative behaviour, ‘vacant’ facial expression, and aphasia apart from ‘mmm’ noises. GPE and other systemic examinations were normal. Higher neurological functions were impaired including orientation in time, place and person. Though her sensory and motor system examination was normal she needed assistance for mobilization. Routine investigations were normal except mildly raised CRP (50 mg/L). Her TSH was 90 µIU/L (0.30 to 5 µIU/L) and free Thyroxine 2.8 pmol/L (9 to 25 pmol/L). Lumbar Puncture and screening for limbic encephalitis was negative. Viral PCR and vasculitic antibody testing were unremarkable. Initial CT Head and subsequent MRI were normal. The EEG showed mild cerebral dysfunction but no evidence of epileptiform activity. The patient was given one dose of intravenous T3 followed by oral thyroxine replacement. Over a period of one week patient’s neurological dysfunction improved back to normal. Her TFTs are within the range on Thyroxine 100 µg OD. The patient is now followed-up in the joint antenatal-endocrine clinic. Her serial growth scans have been normal till 34 weeks of pregnancy. There is no evidence of fetal goitre on the scan.
Discussion: This patient had profound neurological dysfunction due to severe untreated hypothyroidism in first trimester of pregnancy. It remains to be seen whether this will have an impact on her unborn child. We highlight this case to underline the importance of checking thyroid function tests in patients with acute cognitive impairment.

PP.021
Acute kidney injury associated with HELLP syndrome
Fincham, D; Bapir, M; Arutchelvam, S; Coates, J
University Hospital of North Tees, United Kingdom

Background: Acute kidney injury (AKI) is a rare but potentially life-threatening complication of pregnancy. The incidence of AKI in pregnancy varies, however it appears to have declined from 0.5 per 1000 pregnancies to 1:20,000 in developed countries. The majority of pregnancy associated ARF are transient and occur in women with substantial comorbidities. ARF may occur due to pre-renal factors such as dehydration and hypovolaemia. Ischemic tubular necrosis may also occur due to direct tubular damage by microvascular thrombotic disorders such as pre-eclampsia, DIC and HELLP.

We report a case of a 29-year-old para1 with previous history of pre-eclampsia, admitted for planned caesarean section at 39 weeks of gestation, which was complicated in the immediate postoperative period by a raised BP, oliguria and reduced oxygen saturations. Following biochemical and radiological investigations a diagnosis of HELLP was made. During her stay in ITU the patient developed microangiopathic haemolytic anaemia with deteriorating renal function which required renal support and transfer to a tertiary unit. Patient renal function returned to normal at postnatal follow-up.

Conclusions: HELLP occurs in 1–6:1000 deliveries, it affects 20% of women with severe pre-eclampsia and in one series ARF complicated 62% of women with HELLP. The prognosis of ARF in obstetric patients is much better than in non-pregnant patients. Mortality is between 10 and 20% when ARF occurs as single organ dysfunction however may increase to 30–60% when it occurs as part of multi-organ failure.

Successful management of AKI warrants a thorough understanding of the physiological adaptations in the kidney during pregnancy. Whilst these physiological changes make the diagnosis of AKI in pregnancy difficult early diagnosis is necessary to improve both maternal and fetal outcomes.

PP.022
Addison’s disease in pregnancy: a case report
El-Talatini, MR; Noor, S; Sant, M; Magd, S; Ikhena, S
Obstetrics Department, Pilgrim Hospital, Boston, Lincolnshire, United Kingdom

Background: Most of the 8400 cases of Addison’s disease in the United Kingdom are due to autoimmune destruction of the adrenal gland and is rarely encountered in pregnancy as most cases have been diagnosed prenatally.

Case: We report a clinical case of a 30-year-old gravid woman with two previous normal vaginal deliveries. She was diagnosed with hypothyroidism at the age of 16 years with a strong family history of hypothyroidism. Her current pregnancy was problematic with five hospital admissions starting at 8 weeks of gestation with excessive vomiting, hypotension and lethargy and she was unresponsive to the usual antiemetics used during pregnancy. During her last admission (15 weeks of gestation) postural hypotension and hyperpigmentation of her skin fold were noted. The patient was reviewed by an endocrinologist who requested a 9 am serum cortisol level, and ACTH and (Synacthen test). Her 9 am cortisol level was <20 nmol/L, her ACTH >1250 ng/L (normal value 0–46 ng/L) and she had a loss of cortisol response to synthetic ACTH (Synacthen test); serum cortisol before and after the test were both <20 nmol/L. Immunology showed the presence of positive adrenal antibodies. After intravenous normal saline and intramuscular hydrocortisone (100 mg stat dose followed by 50 mg 6 hourly for 48 hours) her serum cortisol increased to 196 nmol/L, with the patient feeling immediately better and her vomiting ceased. The patient was continued on a maintenance dose of oral hydrocortisone and fludrocortisone. She had an uneventful pregnancy and had spontaneous normal vaginal delivery at term.

Conclusions: Patient presentation with excessive vomiting delayed her diagnosis as only treatment for hyperemesis was contemplated. Addison’s disease usually presents outside pregnancy and so was not considered, however, clinicians should be aware that excessive vomiting could be caused by Addison’s disease and test the patient appropriately.

PP.023
Adenomyosis: a clinically missed entity
Patel, B; Unipan, E; Rao; Ramroop, N
Broomfield Hospital, Chelmsford, Essex, United Kingdom

Objective: To identify the proportion of patients who had adenomyosis as a cause for failed endometrial ablation.

Background: Heavy menstrual bleeding (HMB) affects 1 in 5 women and leads to 21% of gynaecological referrals from GP’s. The coexistence of other gynaecological pathology, such as adenomyosis or myomas, is associated with increased failure rates with uterine conserving procedures like Novasure® (Hologic, Bedford, MA, USA). Adenomyosis remains one of the most common pathological findings in hysterectomy specimens.
Methods: Retrospective analysis of histopathology reports of all hysterectomy specimens during a period of 1 year. All patients with history of Novasure® endometrial ablation were identified and they were classified into two groups; those who did and those who did not have adenomyosis in their report. Clinical symptoms and other pathologies in these two groups were compared.

Results: Of 414 hysterectomies were performed due to various reasons during a period of 1 year at Broomfield hospital. Patients who had Novasure® ablation with histology showing Adenomyosis n = 19.

<table>
<thead>
<tr>
<th>Symptoms</th>
<th>Histology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bleeding</td>
<td>Adenomyosis 15</td>
</tr>
<tr>
<td>Bleeding + pain</td>
<td>Adeno + Fibroid 3</td>
</tr>
<tr>
<td>Pain</td>
<td>5 (26.3%)</td>
</tr>
</tbody>
</table>

Patients who had Novasure® ablation with histology not showing Adenomyosis n = 21.

<table>
<thead>
<tr>
<th>Symptoms</th>
<th>Histology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bleeding</td>
<td>No abnormality 18</td>
</tr>
<tr>
<td>Bleeding + pain</td>
<td>Fibroid 3</td>
</tr>
<tr>
<td>Pain</td>
<td>2 (9.5%)</td>
</tr>
</tbody>
</table>

Conclusion: Nearly half (47.5%) of all the patients who had hysterectomies following endometrial ablation had adenomyosis, and was the sole abnormality detected in 78.9% of these patients. This concludes that adenomyosis is, indeed, the most common cause of failure of endometrial ablation. HMB was the most common reason for hysterectomy following ablation irrespective of the histological findings in both these groups, however pain was more common in patients with adenomyosis (26.3% vs. 9.5%). This highlights the importance of appropriate patient selection, prior to ablation, to reduce the failure rate.

PP.024
An audit of our documentation during the induction of labour process
Kindering, L; Moatti, Z; Calandrini, N; Horner, E
St Mary’s Hospital, Imperial College Healthcare NHS Trust, London, United Kingdom

Objective: To assess the documentation surrounding the induction of labour process. Induction of labour is an intervention in pregnancy associated with risks for both the mother and fetus. Vigilant documentation is essential for both communication among healthcare professionals and medico-legal purposes.

Methods: A prospective audit was performed across two maternity units. Women booked for induction of labour between September 2011 and 2012 were identified at random. Notes were reviewed and documentation was compared against standards set by CNST.

Results: The notes from 108 women were reviewed. Mean age was 32 years (range 18–40 years), 45% were primips. Mean BMI 28, and mean gestation at induction was 40+3 (range 35–42 weeks). Indications for induction were ‘post-dates’ (53%), diabetes (23%), pre-eclampsia (7%), and advanced maternal age (7%). Forty-four percent were induced initially with Dinoprostone 10 mg PV. Four percent required further Prostin E2 1 mg PV prior to ARM. Forty-one percent had Prostin E2 as initial induction agent. Fifteen percent were induced by ARM. Documentation at initiation of induction was good particularly vaginal examination findings (100%), and the details of the electronic fetal monitor findings (90%). Abdominal palpation was documented in 83% cases, and maternal observations in only 75%. At the 12 hour review, timing and details of repeat abdominal and vaginal examinations were documented in 22% and 33% of cases. Uterine tachysystole occurred in 10 cases (9%). Appropriate documentation and management occurred in 7%. Fifty-three percent had a vaginal delivery, 32% emergency caesarean section, and 15% an instrumental delivery. Eighty percent had paired umbilical cord pH samples. Six neonates were admitted to the neonatal special care unit.

Conclusion: Documentation is good in the initial phases of the induction process. At the 12–24 hour review this declines (22% had clear documentation). Trainees and midwives of the future should be mindful of careful documentation during induction of labour process.

PP.025
An audit on management and follow-up of gynaecology patients with vaginal agenesis
Dempsye, A; Crouch, N
St. Michael’s Hospital, UH Bristol, United Kingdom

Objective: To assess the management and outcome of vaginal dilatation in patients with vaginal agenesis. Identify patients diagnosed with vaginal agenesis over the past 5 years. Assess management and frequency of follow-up. Assess successful outcome. Assess patient satisfaction.

Background: Vaginal agenesis is a rare condition. Requires tertiary centre referral. Adolescent Gynaecology clinic. MDT involvement. Main treatment involves dilator use to allow comfortable intercourse.


Results and conclusions: Age range at diagnosis 3–20 years. Six had documented vaginal length at start of treatment (54.5%), four documented length at end of treatment (36.3%), nine had documented MDT involvement (81.8%), six had documented access to psychology (54.5%)-2 of these were referrals to London, nine had open access to nurse specialist. 10 (90.9%) had
PP.026
An audit on the management of molar pregnancies in a district general hospital
Al-Kufaishi, A; Hollamby, S
West Middlesex University Hospital (WMUH), London, United Kingdom

Objective: To investigate the management of patients who have a histologically confirmed molar pregnancy.

Background: Gestational trophoblastic disease (GTD) is rare with an incidence of 1 in 700 live births. 1600 cases are registered each year in the UK where an effective registration and treatment programme is in place. A previous audit within our department identified that 10% of patients were not referred to our local GTD centre, Charing Cross Hospital (CXH). As a result both the Early Pregnancy Unit (EPU) and Pathology department conduct regular audits to ensure no cases are missed.

Methods: A retrospective cohort analysis of all molar pregnancies diagnosed at histopathology over a 3 year period.

Results and conclusions: The number of cases missed and not referred at diagnosis has dropped significantly to 2.9%.

Thirty-four patients had confirmed molar pregnancies on WMUH pathology reports. Twenty-nine were referred to and confirmed by CXH and four were referred but diagnosed as non-molar tissue. One patient however was not referred until 231 days later due to locum staff and administration failure. This case was not highlighted in both the EPU and pathology department audits. Eventually all molar pregnancies were referred to CXH with appropriate investigations including a chest X-ray and HCG level completed. As a result of this audit previous implementations were reviewed. The pathology department conducts 2–4 weekly audits and the EPU highlight any suspicious USS findings and chase their histology. In addition all reports of molar pregnancies once typed by the secretaries are then e-mailed directly to the EPU Sister and Consultant.

PP.027
An unusual case of splenic rupture post laparotomy
Gbadamosi, J; Biswas, S; Uttley, J; Nishtar, A; Sieunarine, K
Kettering General Hospital, United Kingdom

Background: Postoperative intraperitoneal bleeding is a well recognised complication of open pelvic surgery. Primary causes of bleeding include: a return of blood pressure re-vascularising collapsed capillaries and small vessels or slippage of a vascular ligature. A much rarer cause would be bleeding from a distant organ such as the spleen, for example following Palmer’s point entry at laparoscopic surgery. Spontaneous splenic haemorrhage has never been reported following a Pfannenstiel open laparotomy.

Case: A 53-year-old lady presented as an emergency with severe lower abdominal pain. Observations revealed a septic picture and she was commenced on empirical intravenous antibiotics. CT scan suggested a large complex ovarian cyst and CA125 was normal. Multidisciplinary team review concluded the cyst was inflammatory in origin. The patient showed minimal improvement on intravenous broad spectrum antibiotics. An exploratory laparotomy revealed a small pelvic abscess with oedematous fallopian tubes, no significant ovarian involvement and extensive sigmoid and rectal adhesions. Bowel adhesiolysis was performed with the general surgeons and then the abscess was drained with generous intra-abdominal lavage. Initially, the patient improved clinically. However 48 hour postoperatively, she collapsed complaining of left upper quadrant pain and with signs of intraperitoneal haemorrhage. An urgent CT showed a large peri-splenic haematoma with visible evidence of active haemorrhage. On returning to theatre, a haemorrhagic spleen was found requiring a splenectomy. Following this she made a satisfactory recovery.

Conclusion: This is the first reported case of spontaneous splenic rupture following open pelvic surgery. Occurrence is usually secondary to infections (e.g. Epstein–Barr virus), haematological or connective tissue disease, however it can be idiopathic. No obvious cause was found in this case. Possible aetiology may have been a sudden increase in intra-abdominal pressure from coughing or vomiting postoperatively, which may have resulted in minor traumatic splenic rupture.

PP.028
An unusual cause for pyrexia
Morris, A; Collier, H; Chari, S
Royal Lancaster Infirmary, Lancaster, United Kingdom

Background: Systemic Lupus Erythematosus is a multisystem autoimmune disorder. The incidence is approximately 1:1000, women in their child bearing years being most commonly affected. The clinical presentation is heterogeneous. Fever occurs in 80% of cases. 

Case: An 18-year-old women presented at 38 weeks of gestation with a pyrexia of 40.4°C and features of sepsis. A urine dipstick was positive for protein, leucocytes and nitrates. Full blood count showed anaemia and leucocytosis. She was commenced on intravenous Cefuroxime and Metronidazole. On day 3 she remained pyrexial. Examination was unremarkable. Chest X-ray was normal and urine and blood cultures were negative. On the advice of microbiology antibiotics were changed to intravenous gentamicin and Meropenem. On day 5 the clinical picture was unchanged with pyrexia, anaemia, leucopenia and thrombocytopenia. The CTG became pathological and she underwent emergency caesarean section. Postoperatively, a CT
scan showed bilateral pleural effusions, and hepatosplenomegaly. An echocardiogram was normal. On day 10 an erythematous rash developed on the patients buttocks. The rheumatologists were consulted and elicited a history of mouth ulcers and alopecia. A diagnosis of SLE was made and the patient was commenced on prednisolone. This resulted in resolution of the signs and symptoms.

Conclusions: Specific diagnostic criteria for SLE are described by the American Rheumatism Association but lupus like illnesses may not fulfil all these criteria. A minority of patients may not exhibit typical antinuclear or double stranded DNA antibodies. The haemolytic anaemia, thrombocytopenia, leucopenia and lymphopenia are all features of SLE. Complement levels C3 and C4 were low, suggestive of an immune complex mediated disease. Double stranded DNA antibodies anti-Ro and anti-La antibodies were negative in this patient.

PP.029
An unusual presentation of endometriosis
Biswas, S; Lloyd, S; Haughney, R
Kettering General Hospital, United Kingdom

Background: Endometriosis is a common gynaecological condition in which tissue similar to the endometrium appears outside the endometrial cavity. This tissue is influenced by hormonal changes and responds in a way that is similar to the cells within the normally sited endometrium. When prescribing HRT in a woman who has undergone surgery for endometriosis, it must be noted that it is a hormone dependant condition and unopposed oestrogen replacement could lead to recurrence of the condition.

Case: A 64-year-old woman presented 18 years after a total abdominal hysterectomy and bilateral salpingo-oophorectomy with a history of abdominal pain and vomiting. An ultrasound scan of the abdomen revealed a large septated, multilocular, cystic structure arising from the pelvis. This was later confirmed on CT scan. Raised amylase and gallstones initially led to the diagnosis of acute pancreatitis with a pancreatic pseudocyst. Repeated admissions with pain and imaging, revealed the same mass, and on laparotomy and biopsy this was found to be active endometriosis. The patient had been on estrogen only HRT since her hysterectomy. The HRT was stopped once the diagnosis was made and follow-up CA 125 and ultrasound scans confirmed gradual resolution of the mass.

Conclusion: There have been very few studies addressing this issue or comparing the benefit of estrogen only HRT versus a continuous combined preparation (CCHRT). Most of the literature seems to suggest that recurrence of symptoms and endometriotic pathology is higher with ERT. The rationale for prescribing combined HRT is that the progesterone component will protect against the stimulant action of oestrogen on any residual endometriotic tissue. Although rare, endometriosis should be considered as a differential diagnosis in women taking HRT who present with symptoms such as pelvic pain or a pelvic mass following TAH and BSO.

PP.030
An unusual presentation of mesothelioma
Smith, E; Vanes, NK; Julian, S
University Hospitals of Coventry and Warwickshire, Coventry, United Kingdom

Background: We present a case report of an unusual presentation of mesothelioma to increase gynaecologist’s awareness of this disease. A 46-year-old, para 3 lady presented to her gynaecologist with a one year history of menorrhagia, fatigue and a bloated abdomen. She denied any intermenstrual or postcoital bleeding, and denied bowel or bladder symptoms.

Case: An ultrasound was performed demonstrated an increased endometrial thickness of 25 mm with probably polyps. In the pouch of Douglas there was a cystic mass measuring 10 cm × 7 cm, honeycomb in appearance, mobile and extending from the posterior cervix to uterine fundus. No increased vascularity and no solid areas were seen. Her tumour markers CA125, CA19-9, AFP and hCG were normal. A diagnostic laparoscopy was performed which showed mucoid cystic lesions from sigmoid and caecal colon. Multiple biopsies were performed. Histology demonstrated benign cystic mesothelioma.

Results and conclusions: Benign cystic mesothelioma is a neoplasm consisting of multiple benign fluid-filled cysts. It is more common in women of reproductive age than men. It does not metastasise however does tend to recur locally. Treatment consists of surgical resection. Chemotherapy and radiotherapy are not advocated. Close follow-up is recommended even after treatment. The prognosis remains excellent with reoccurrence of up to 50%.

PP.031
Anaemia in pregnancy – ‘thinking outside the box’
Greer, O; Hardy, C; Das, S
Department of Obstetrics and Gynaecology, Luton and Dunstable University Hospital, Luton, United Kingdom

Objective: To highlight the various causes of anaemia, as seen in pregnancy, to describe their pathophysiology and to emphasise the importance of a multidisciplinary approach in diagnosing the rarer causes, in order to achieve optimal patient outcomes.

Background: Anaemia is one of the commonest conditions in pregnancy and although often due to iron deficiency, anaemia has the same differentials as in the non-pregnant patient. This includes haematocin deficiencies, haemoglobinopathies and the haemolytic anaemias. With the help of the multidisciplinary team (MDT) we reached a diagnosis of ‘anaemia of chronic disease’ secondary to systemic lupus erythematosus (SLE), a diagnosis made in our patient during this pregnancy.

Case: We report a case of a 38-year-old para 2 with known Sjogren’s disease and a past history of multiple deep vein thrombosis (DVT), who presented with a severe anaemia of pregnancy which was intractable to first line treatment options, including oral iron and folate supplementation, repeat transfusions of red packed cells and B12 injections.
The history of multiple DVTs prompted a limited thrombophilia screen which revealed a strongly positive ANA (already associated with Sjogren’s disease), a positive anti-Ro, but negative screen for anti-cardiolipin, anti-thrombin and for the Factor V Leiden and prothrombin genes. Further targeted investigation demonstrated low complement levels and a strongly positive dsDNA leading to a diagnosis of SLE.

**Conclusions:** After exclusion of haemolysis and/or concealed haemorrhage, a MDT approach (involving predominantly obstetricians, haematologists and rheumatologists) resulted in a completely new diagnosis, in this pregnancy, of SLE. Accordingly, steroid treatment was initiated, resulting in a timely increase in the patient’s haemoglobin levels.

Taking a methodical approach to the background history, by seeking advice from appropriate specialists and by targeted investigations, the correct diagnosis was reached, resulting in optimal patient management.

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**PP.032**

Are we managing incomplete miscarriage appropriately? Can we predict the outcome according to initial ultrasound criteria?

*Aslam, N; Mercer, L; More, S; Gupta, P; Pradhan, P*

Heartlands Hospital NHS Trust, Birmingham, United Kingdom

**Objective:** The aim of this audit was to identify compliance with the local and national guidelines in the management of incomplete miscarriage and to find out the role of ultrasound in predicting the outcome. We also want to find out the most successful and most patient favoured treatment and how the service can be improved further.

**Background:** Treatment options for incomplete miscarriage includes expectant, medical, manual vacuum aspiration (MVA) and surgical management of miscarriage (SMM). However ideal treatment of incomplete miscarriage is yet to be established.

**Methods:** Prospective audit over period of 3 months. Case notes were reviewed of all patients admitted with incomplete miscarriage following spontaneous, after expectant/medical management of missed miscarriage and following surgical management. All patients had initial ultrasound in addition to clinical diagnosis.

**Results:** Total patients were (*n* = 50). Mean age was 30.32% chose expectant management, 30% medical management and 32% SMM and 6% MVA. Forty percent of patients having expectant management had baseline and repeat Beta HCG in 48 hours to confirm the falling trend and home pregnancy test in 2 weeks. No definite protocol was followed for medical management, 7% had single 800 μg misoprotol vaginally, 93% had full regime for medical management and 13% had repeat medical management. Two percent had MVA and 8% requesting SMM waited on average 24–48 hours for the procedure to be done. The success rate of expectant management was 75%, the medical management about 60%.

**Conclusions:** Compliance with the guideline, but doing some unnecessary investigations. Expectant management appears to be most successful, safe and less expensive. Surgical management equally good, but expensive with associated procedure related risks. Medical management needs more standardisation. Single dose of misoprotol for medical management should be adopted. Neither the presence of gestational sac, nor the endometrial thickness at diagnosis can be used to predict the likelihood of management failure.

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**PP.033**

Assessing the outcome of women with mixed urinary incontinence undergoing repeat urodynamics prior to having continence surgery and subsequent persistence or worsening of urgency symptoms

*Gadhia, P; Afshan, N; Bhal, K*

Llandough Hospital, United Kingdom

**Objective:** To review the practice of objectively proving that the detrusor overactivity or low compliance associated with urgency is controlled using anticholinergic treatment prior to undergoing continence surgery as historical audits have shown that the post-op urgency rates in women where the urgency has not been controlled are higher.

**Methods:** Retrospective review of all patients that had undergone a mid-urethral tape from our local urogynaecology database between 2008 and 2010. Total number of cases: 133.

**Results:** Age: 32–76 years, BMI: 28–40.

<table>
<thead>
<tr>
<th>Observations</th>
<th>Pure SUI (N = 100)</th>
<th>Mixed UI with UDS (N = 26)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DO cured objectively on urodynamics</td>
<td>–</td>
<td>23 (88%)</td>
</tr>
<tr>
<td>Type of midurethral tape</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Retropubic</td>
<td>66 (66%)</td>
<td>3 (10%)</td>
</tr>
<tr>
<td>Transobturator</td>
<td>34 (34%)</td>
<td>23 (90%)</td>
</tr>
<tr>
<td>Post operative complications</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SU1 improved or cured</td>
<td>85 (85%)</td>
<td>18 (69%)</td>
</tr>
<tr>
<td>Denovo Urgency</td>
<td>3 (3%)</td>
<td>3 (12%)</td>
</tr>
<tr>
<td>Large residual volume</td>
<td>8 (8%)</td>
<td>1 (4%)</td>
</tr>
<tr>
<td>Groin pain</td>
<td>3 (3%)</td>
<td>0</td>
</tr>
<tr>
<td>Bladder perforation</td>
<td>1 (1%)</td>
<td>0</td>
</tr>
</tbody>
</table>

Those MUI with DO not controlled on UDS; 2 out of 3 (67%) had persisting or worsening urgency.

**Conclusion:** Improvement rates for stress urinary incontinence symptoms were lower in the mixed group. However, the development of denovo or recurrence of urgency symptoms especially in the mixed group was higher despite objectively controlling the detrusor overactivity. In women where the detrusor overactivity persisted in repeat urodynamics the urgency rate was very high although the numbers in this group were too small to be of significance (1, 2). We currently use this information to help counsel patients undergoing a midurethral tape especially in the group who have a mixed picture that choose
to have a mid urethral tape for symptoms of stress urinary incontinence.

**PP.034**

**Association of placental perfusion, as assessed by magnetic resonance imaging and uterine artery Doppler ultrasound, and its relationship to pregnancy outcome**

**Derwig, I; Lythgoe, DJ; Barker, GJ; Poon, L; Yeung, R; Gowland, P; Zelaya, F; Nicolaides, K**

Harris Birthright Research Centre, King’s College Hospital, London, United Kingdom

**Objective:** To investigate (i) if placental perfusion in the second trimester of pregnancy, measured by two non-invasive Magnetic Resonance Imaging (MRI) techniques, is related to impedance to flow in the uterine arteries, as assessed by Doppler ultrasound; and (ii) if these measures are associated with future gestational outcome.

**Methods:** In 37 singleton pregnancies at 24–29 weeks of gestation, uterine artery pulsatility index (PI) was measured by Doppler ultrasound and placental perfusion was measured by Arterial Spin Labelling ([flow-sensitive alternating inversion recovery (FAIR)] and intravoxel incoherent motion (IVIM) echo planar imaging at 1.5T in basal, central and placental regions of interest. The values were compared between those delivering small for gestational age (SGA) and appropriate for gestational age (AGA) neonates.

**Results:** In 3 pregnancies that resulted in delivery of SGA neonates, compared to the 14 with AGA neonates, the median basal FAIR measure was significantly lower (923 versus 2359 arbitrary units; \( P = 0.003 \)) as were IVIM measures of perfusing fraction (\( f \)) in basal, central and whole-placental regions (37.8 versus 40.7%; \( P = 0.046 \); 24.3 versus 35.1%; \( P = 0.014 \) and 27.9% versus 36.2%; \( P = 0.001 \), respectively). In the SGA group, the median uterine artery PI was increased (1.96 versus 1.03; \( P = 0.001 \)). There were significant associations between uterine artery PI and placental perfusion assessed by both FAIR and IVIM.

**Conclusions:** Pregnancies that result in SGA neonates exhibited reduced placental perfusion as assessed by FAIR during the second trimester. This measurement was found to be strongly associated with impedance to flow in the uterine arteries. We suggest that FAIR or IVIM MRI examinations may be used to directly and non-invasively determine placental perfusion, and that the measured values are strong indicators of future gestational outcome.

**PP.035**

**Association of placental T2 relaxation times and uterine artery Doppler ultrasound measures of placental blood flow**

**Derwig, I; Barker, GJ; Poon, L; Zelaya, F; Gowland, P; Lythgoe, DJ; Nicolaides, K**

Harris Birthright Research Centre, King’s College Hospital, London, United Kingdom

**Objective:** To investigate whether, in the second trimester of pregnancy, placental T2 relaxation time (determined using Magnetic Resonance imaging [MRI]) is related to impedance to flow in the uterine arteries.

**Methods:** In 40 singleton pregnancies at 24–29 weeks of gestation, uterine artery pulsatility index (PI) was measured by Doppler ultrasound and T2 relaxation time was measured by echo planar MRI at 1.5T. The significance of the associations between T2 relaxation time, uterine artery PI and birthweight were examined.

**Results:** In 25 pregnancies that delivered small for gestational age (SGA) neonates with birthweight below the 10th percentile, compared to those with appropriate for gestational age (AGA) birth weight, the T2 relaxation time was significantly decreased (88 ms versus 149 ms, \( P < 0.0001 \)) and uterine artery PI was increased (1.96 versus 1, \( P < 0.0001 \)). There were significant associations between placental T2 relaxation time and log10 uterine artery PI (\( r = -0.749, P < 0.0001 \)), and between T2 relaxation and birth weight percentile (\( r = 0.693, P < 0.0001 \)).

**Conclusions:** The T2 relaxation time during the second trimester is shorter in pregnancies that subsequently deliver SGA neonates and the measurement is strongly correlated with impedance to flow in the uterine arteries.

**PP.036**

**Association of placental volume measured by MRI and birthweight percentile**

**Derwig, I; Akolekar, R; Zelaya, F; Gowland, P; Barker, GJ; Nicolaides, K**

Harris Birthright Research Centre, King’s College Hospital, London, United Kingdom

**Objective:** To investigate if placental volume in the second trimester of pregnancy is related to uterine artery blood flow and neonatal birthweight.

**Methods:** In 83 singleton pregnancies at 24–29 weeks of gestation, uterine artery pulsatility index (PI) was measured by Doppler ultrasound and placental volume was calculated from images obtained by magnetic resonance imaging (MRI) at 1.5T. The significance of the association between placental volume, uterine artery PI and birthweight was examined.

**Results:** In 37 normal pregnancies resulting in delivery of neonates with birthweight on or above the 10th percentile the median placental volume increased with gestational age from 363 cm³ at 24 weeks to 515 cm³ at 29 weeks. In 46 pregnancies...
that resulted in delivery of small for gestational age (SGA) neonates with birthweight below the 10th percentile the median placental volume, corrected for gestational age, was significantly decreased by 120 cm³ ($P < 0.0001$) and median uterine artery PI was increased (1.87 versus 1.59, $P < 0.0001$). There were significant associations between placental volume and both uterine artery PI ($r = -0.677, P < 0.0001$) and birthweight percentile ($r = 0.658, P < 0.0001$).

**Conclusions:** Placental volume during the second trimester is smaller in pregnancies that subsequently deliver SGA neonates and the measurement is related to placental perfusion.

**PP.037**

**Audit of early pregnancy assessment unit at a district general hospital. Can we deliver a service to national standards?**

Khan, L; Noor, S; Muppala, H

Department of Obstetrics and Gynaecology, Pilgrim Hospital, Sibsey Road, Boston, United Kingdom

**Objective:** To provide the first audit data in the Early Pregnancy Audit in line with new NICE guidelines in the management of miscarriage and ectopic pregnancy.

**Background:** Problems relating to pain and bleeding in early pregnancy are the cause of significant anxiety amongst patients. Ideally access to an early pregnancy unit seven days a week would ensure patients could be seen quickly and efficiently, thus reducing anxiety. Recent NICE guidance on early miscarriage and ectopic pregnancy has emphasised conservative management of patients being offered as first line treatment.

**Methods:** A retrospective audit was conducted. A total of 41 case notes were audited using a departmental developed pro forma.

**Results:** Of all patients referred to EPAU, 66% of patients were referrals from AE or GP. The majority of patients, 71.5%, were seen within 48 hours of referral. Fifty percent (9/18) of patients with a viable pregnancy required more than one scan to confirm viability, indicating that there were scanned too early in gestation at first presentation. Seventy-five percent of incomplete miscarriages (3/4) were managed conservatively, compared to 62.5% (5/8) of missed miscarriages. Of all the patients reviewed, 7% (3/41) had a diagnosis of an ectopic pregnancy, with 100% of these having surgical management. None of these patients suited NICE criteria for conservative management of ectopic pregnancy.

**Conclusions:** For viable pregnancy patients requiring more than one scan, the majority did not have baseline $\beta$-hCG results before the first scan. If these results were available, the initial USS could have been postponed to make for better resource management. Less than 75% of all miscarriages were managed conservatively. There should be a move to offer as first line, conservative management of miscarriage, along NICE guidelines.

**PP.038**

**Audit of emergency caesarean section in a district general hospital**

Syeda, K; Rahman, O; Geris, S

Medway Maritime Hospital, United Kingdom

**Objective:** To identify the reasons for emergency caesarean section, to check adherence to agreed standards and quality of documentation.

**Background:** In England, the caesarean section rate has increased from 9% in 1980 to 24.6% in 2008–2009. Identification of reasons for the increasing trend of caesarean sections is important. Fetal blood sampling reduces the likelihood of caesarean sections in suspected fetal acidosis. The urgency of caesarean section should be documented to aid clear communication between healthcare professionals.

**Methods:** Retrospective audit from 01/02/2013 to 31/03/2013.

**Results:** The emergency caesarean section rate in February and March was 18% (69) and 13% (53) respectively. Emergency caesarean section was performed in 32 cases (29%) for fetal distress. Of these cases, fetal blood sampling was not performed in 15 (47%) cases where the cervix was four or more cm dilated; cord gases were normal in 7 (22%) of these cases. Of the 32 deliveries for fetal distress, cord gases were normal in 14 (44%). The caesarean section category was documented in 57 (52%) cases and not documented in 52 (48%) cases. The decision to interval time according to category was not met in 26 (24%) cases.

**Conclusions:** Clear documentation is a CNST requirement for the improvement of patient safety and clinical practice. A learning point highlighted was the importance of documenting the decision process and informing seniors. Accurate documentation improves the thought process, rationale behind one’s decision making and is also increasingly important for medico-legal reasons. All diagnostic tools available for fetal distress should be used to avoid unnecessary procedures unless otherwise indicated. Mandatory CTG review meetings were recommended.

**PP.039**

**Audit of patients attending minor procedures clinic**

Corr, T; Adishesh, M; Holland, N

Warrington Hospital, Warrington and Halton NHS Trust, United Kingdom

**Objective:** To assess service provision in the clinic, to assess number of biopsies or excisions performed and to make amendments in following up patients with vulval problems.

**Background:** According to RCOG greentop guideline, vulval problems are very common and patients should be referred to secondary care if not responding to treatment or new lesions detected. Not all patients need biopsy. Certainly high risk patients must be followed up. Self-surveillance is recommended for these women.
Methods: It was retrospective study of 80 patients who attended Minor procedure clinic, between January 2012 and December 2012. Information got from clinic letters and histopathology reports.

Results: Around 70% of women referred to this clinic were more than 50 years of age. Of 46% had pruritus, 19% lesion on vulva, 10% soreness and remaining were combination. Of 81% had single biopsy, 5% had multiple biopsies and 13% none. Histology showed 38% women had chronic inflammation, 34% had LSA, 4% lichen simplex, 3% VIN, other 21%. 30% were discharged back to GP and written with results of biopsy and 65% were followed up in GOPD.

Conclusions: About 30% patients were directly discharged from the clinic rest of them were followed up in the GOPD. More than 50% women were above 50 years. We think patients should have biopsy prior to being labelled as lichen sclerosus as there may a possibility of inappropriate treatment with potent steroids, explanation about incorrect cancer risk, unnecessary GOPD follow-up.

Secondly some patients may be managed patients with other skin conditions are incorrectly managed by the wrong clinical specialty. From our study we think biopsy is justified in nearly all cases for the above reasons.

PP.040
Audit of surgical evacuation of uterus
Slavska, M; Nagrani, R
Princess of Wales Hospital, Bridgend, Wales

Objective: To assess if RCOG guideline ‘Management of early pregnancy loss’ is being followed when women undergo surgical evacuation of uterus (EVAC). The primary objective was to evaluate timing of EVACs booked on CPOD list. We also assessed: indications, pre-op screening for chlamydia, peri-op use of antibiotics and oxytocin and histopathological assessment of the obtained tissue.

Background: EVACs for various indications are being performed on a daily basis in our unit. There were, however, many cancellations which affected patients’ satisfaction. We decided to evaluate the service and investigate if the procedures are done in a timely manner and according to the guideline.

Methods: A list of 50 consecutive cases which had EVAC before August 2012 was obtained from theatre computer system. Forty-two case-notes reviewed.

Results: Nineteen percent of cases were performed later than 24 hours from booking due to various reasons such as: high activity in CPOD theatres, no procedures were booked for weekends/holidays and lack of handover. Fifty-five percent of procedures were done for maternal preference, 45% of cases were screened for Chlamydia, 53% and 95% of women had intra-operative antibiotics and oxytocin respectively. Histology results were available in 50%.

Conclusions: Patients need to be counselled regarding delay/cancellation of the procedure. We established that EVACs can be booked for the weekend and handover must improve. Group of patients requiring chlamydia screening should to be defined as only high risk cases might need testing by default. Literature search established that RCOG recommendation for histological analysis of obtained tissue is not based on firm evidence hence only cases which are suspicious of molar/ectopic pregnancy should have the samples sent off. Perioperative antibiotic cover necessity needs to be confirmed and will be discussed at our gynaecology forum in view of all obtained Chlamydia screening results being negative. Developing patient information leaflet for the procedure is being undertaken.

PP.041
Audit of WHO Surgical Safety Checklist for maternity cases only
Amin, T; Goel, R
Glangwili Hospital, Howel Dda NHS Trust

Objective: To audit the compliance with WHO Surgical Safety Checklist for maternity cases only in obstetric department at Glangwili hospital.

Background: This checklist for maternity cases only was adapted from WHO Surgical Safety Checklist to make sure it is relevant and applicable to maternity care and that all key clinical risks in this environment are addressed. The purpose is to strengthen the commitment of clinical staff to address safety issues within the maternity setting. The checklist is a tool for the relevant clinical teams to improve the safety of surgery by reducing deaths and complications for women and babies. It also opens up lines of communication between all staff present, in order to realise improved clinical outcomes. It is part of ‘Patient Safety First’ in England, and ‘1000 Lives’ campaign in Wales.

Methods: Retrospective review of 48 case notes of women who had surgical procedures in the maternity theatre for 1 month. Data collected on the pro forma and results were analysed and compared to standard which was, WHO Surgical Safety Checklist for maternity cases only, Guidance, November/2010, NPSA and RCOG.

Results and conclusions: Type of the procedures were, 22 emergency caesarean sections, 21 elective caesarean section and 5 forceps deliveries. 65% of cases the WHO Surgical Safety Checklist for maternity cases were done. Sign in section was completed in 65% of cases. Time out section was completed in 61% of cases. Sign out section was completed in 61% of cases. We need to increase awareness for this checklist among midwives, obstetricians, anaesthetist, theatre teams and improve compliance. Re-audit in 6 months.
PP.042
Audit on surgical site wound infection in obstetrics and gynaecology
Nayini, K; Muberekwa; Mathew
Chesterfield Royal Hospital, Chesterfield, United Kingdom

Objective: To identify and analyse risk factors for surgical site wound infections in abdominal surgeries in obstetrics and gynaecology.

Background: Advances in surgery and anaesthesia have resulted in patients who are at greater risk of surgical site infections being considered for surgery. Surgical site infections compose up to 20% of all healthcare-associated infections. Five percent of patients undergoing surgery develop a surgical site infection. Surgical site infections can have a significant effect on quality of life for the patient and also result in considerable financial burden to healthcare providers.

Methods: Retrospective case notes analysis of 11 patients who had surgical site wound infections in abdominal surgeries in Obstetrics and Gynaecology from January 2012 to December 2012 at Chesterfield Royal Hospital.

Results: Out of 862 abdominal surgeries in obstetrics and gynaecology 11 (1.27%) patients had significant wound infection and needed referral to tissue viability. Of 73% had BMI more than 30, 45% were emergency procedures, 45% had co morbid medical conditions, 73% procedures performed by Registrars, 100% had antibiotic prophylaxis, 9% had surgical drains, 36% had EBL more than 500 mL, 82% had subcuticular sutures, 55% had immediate post operative infection, 9% returned to theatre for wound debridement, 27% had VAC dressing, 63% needed readmission after primary operation. Of 73% had BMI more than 30, 45% were emergency procedures, 45% had co morbid medical conditions, 73% procedures performed by Registrars, 100% had antibiotic prophylaxis, 9% had surgical drains, 36% had EBL more than 500 mL, 82% had subcuticular sutures, 55% had immediate post operative infection, 9% returned to theatre for wound debridement, 27% had VAC dressing, 63% needed readmission after primary operation. Of 73% had BMI more than 30, 45% were emergency procedures, 45% had co morbid medical conditions, 73% procedures performed by Registrars, 100% had antibiotic prophylaxis, 9% had surgical drains, 36% had EBL more than 500 mL, 82% had subcuticular sutures, 55% had immediate post operative infection, 9% returned to theatre for wound debridement, 27% had VAC dressing, 63% needed readmission after primary operation. Of 73% had BMI more than 30, 45% were emergency procedures, 45% had co morbid medical conditions, 73% procedures performed by Registrars, 100% had antibiotic prophylaxis, 9% had surgical drains, 36% had EBL more than 500 mL, 82% had subcuticular sutures, 55% had immediate post operative infection, 9% returned to theatre for wound debridement, 27% had VAC dressing, 63% needed readmission after primary operation. Of 73% had BMI more than 30, 45% were emergency procedures, 45% had co morbid medical conditions, 73% procedures performed by Registrars, 100% had antibiotic prophylaxis, 9% had surgical drains, 36% had EBL more than 500 mL, 82% had subcuticular sutures, 55% had immediate post operative infection, 9% returned to theatre for wound debridement, 27% had VAC dressing, 63% needed readmission after primary operation. Of 73% had BMI more than 30, 45% were emergency procedures, 45% had co morbid medical conditions, 73% procedures performed by Registrars, 100% had antibiotic prophylaxis, 9% had surgical drains, 36% had EBL more than 500 mL, 82% had subcuticular sutures, 55% had immediate post operative infection, 9% returned to theatre for wound debridement, 27% had VAC dressing, 63% needed readmission after primary operation. Of 73% had BMI more than 30, 45% were emergency procedures, 45% had co morbid medical conditions, 73% procedures performed by Registrars, 100% had antibiotic prophylaxis, 9% had surgical drains, 36% had EBL more than 500 mL, 82% had subcuticular sutures, 55% had immediate post operative infection, 9% returned to theatre for wound debridement, 27% had VAC dressing, 63% needed readmission after primary operation. Of 73% had BMI more than 30, 45% were emergency procedures, 45% had co morbid medical conditions, 73% procedures performed by Registrars, 100% had antibiotic prophylaxis, 9% had surgical drains, 36% had EBL more than 500 mL, 82% had subcuticular sutures, 55% had immediate post operative infection, 9% returned to theatre for wound debridement, 27% had VAC dressing, 63% needed readmission after primary operation. Of 73% had BMI more than 30, 45% were emergency procedures, 45% had co morbid medical conditions, 73% procedures performed by Registrars, 100% had antibiotic prophylaxis, 9% had surgical drains, 36% had EBL more than 500 mL, 82% had subcuticular sutures, 55% had immediate post operative infection, 9% returned to theatre for wound debridement, 27% had VAC dressing, 63% needed readmission after primary operation.

Recommendations: Surgical site wound infections represent substantial burden for patients and healthcare services. The majority of surgical site infections are preventable by taking measures in pre-, intra- and postoperative phases. Our recommendations from audit are to use negative pressure wound dressing for high BMI patients, prospective audit, formulating local guidelines.

PP.043
Audit on the outcome of twin pregnancies in a district general hospital
Madari, S; Morrison, F
Forth Valley Royal Hospital, Larbert, United Kingdom

Objective: To undertake an audit on the management of twin pregnancies according to NICE standards and to implement changes to improve compliance with standards.

Background: In the UK, the twinning rate has risen from 9.6 per 1000 births (1980) to 16.1 (2009), an average increase of 4% per year. Multiple births currently account for 3% of live births.

Because of the increased risk of complications, women with multiple pregnancies need more monitoring. Local protocols to improve care of these high risk pregnancies are essential.

Methods: The audit was undertaken retrospectively over a period of 1 year. A specially designed form was used to collect data on the care that the women received antenatally. Labour and delivery details along with the neonatal outcomes were also recorded.

Results: Twenty seven DCDA twins and eleven MCDA twins were analysed, ratio of dichorionic to monochorionic twins was 2:1. The overall vaginal delivery rate was 40%; with more vaginal deliveries in dichorionic twins (50%) compared to monochorionic twin (18%). Complications included preterm labour (51%), discordance in growth (26%), PPH >1.5 L (26%) and pre-eclampsia (11%). The overall rate of admission of the twins to the neonatal unit was 40%.

Conclusions: There was good adherence to the NICE guidelines in all areas of the antenatal management of twins however chorionicity was incorrectly diagnosed in few cases by USS. Improvement in the correct determination of chorionicity by USS, offering screening tests and administration of steroids have been recommended. Measures to reduce the risks of PPH and neonatal morbidity have been suggested by adherence to the local protocol.

PP.044
Audit on trial of instrumental deliveries
Mohan, S; Majeed, U; Sawhney, H
University Hospital Wales, Cardiff, United Kingdom

Objective: To compare local practice with the RCOG guidelines on trial of instrumental delivery and an analysis of failed instrumental deliveries.

Background: It is estimated that instrumental vaginal deliveries account for 10–13% of births in the UK. To improve the safety of these deliveries RCOG has recommended prerequisites for trial of instrumental delivery and a standard classification is used

Methods: A prospective analysis of 50 cases of trial of instrumental delivery.

Results and conclusions: A majority of the cases studied were in the reproductive age group, nulliparous and had spontaneous onset of labour with an epidural being the most common mode of pain relief used for the procedure. The most common indication for a trial was failure to progress in the second stage of labour and in more than half the cases an episiotomy was performed. Thirty-one out of the 50 cases showed that there was no genital tract trauma following delivery.

The success rate for trial of instrumental deliveries in this study was 96%. Only two cases with malpositions had to have an emergency caesarean section. Two cases of sequential use of instruments were recorded. Eighty percent of these trials took place in the operating theatre. In approximately half the cases there were no injuries to the baby and in the other half facial bruising and minor injuries were recorded. No case of serious trauma to the baby was seen. In two cases neonatal admissions were recorded due to meconium aspiration and sepsis. Post partum haemorrhage was recorded in just over half the cases.
Shoulder dystocia occurred in 10% of the cases. There was poor documentation of abdominal examination to palpate the fetal head and the emptying of the bladder prior to the procedure. Only 28% of the case notes revealed documentation of debriefing of the patient regarding the events at delivery.

Overall the audit revealed good clinical practice in meeting the prerequisites of a trial of intramental delivery, appropriate choice of instrument and a good success rate with a trial. However documentation and patient debriefing were identified as areas needing improvement.

PP.045
Audit to assess maternal and fetal morbidity with second stage caesarean section
Ansar, H; Malik, S; Kurni, M; Wiessender, C; Navti, O
Leicester General Hospital, University Hospitals Leicester, United Kingdom

Objective: This audit was performed to assess the maternal and fetal morbidity in second stage caesarean.

Background: Rate of caesarean section is increasing and 25% of emergency caesarean sections are performed at full dilatation. Sentinel audit has classified second stage caesarean section as complicated and recommended it to be performed by senior obstetrician.

Methods: This audit was conducted at University Hospitals Leicester. Data were collected from 50 patients on a pro forma prospectively. The standards were selected from the sentinel audit and a recently published article. The standards included the rate of PPH <40%, blood transfusion <20%, uterine incision extension <35% and admission to NNU <8%. The results were then analysed.

Results: The results showed the incidence of PPH as 20% (10), the need of blood transfusion as 4% (2) and Uterine extension 24% (12). However the NNU admissions were 10% (5) which was more than previously reported. Fetal trauma was reported in three babies due to forceps and ventouse. Of 38% (19) reported difficulty in the delivery of the head and 6% had to be delivered as breech. Other maternal complications included bladder injury 2% (1) and sepsis 8% (4). Of 23 cases (46%) were performed out of hours and senior presence was identified in 58% (29).

Conclusion: More senior presence should be encouraged and there is a need to look into the new technologies to reduce neonatal complications such as use of fetal pillow.

PP.046
Bakri balloon tamponade in massive postpartum haemorrhage
Nesbitt, A; Rai, N; Libang, J; Leslie, I; Yoong, W
North Middlesex University Hospital, London, United Kingdom

Objective: The objective of this study was to evaluate the efficacy of Bakri balloon tamponade in inducing haemostasis during massive postpartum haemorrhage (>2000 mL blood loss).

Background: Postpartum haemorrhage (PPH) is an important cause of maternal morbidity and mortality and massive PPH carries a higher risk. Developments in the management of massive PPH have been made in recent years, including uterine balloon tamponade. The Bakri balloon is a uterine tamponade device developed specifically for obstetric use and this study reports a series of 43 cases of massive PPH managed using the Bakri balloon at a North London teaching hospital.

Methods: Cases of women with massive PPH (>2000 mL) between 2007 and 2012 at the North Middlesex Hospital were identified and cases involving Bakri balloon tamponade were extracted. These were analysed in retrospect.

Results: There were 43 cases included in our study, of which 14 (32.6%) required further haemostatic measures in the form of compression sutures used in the ‘uterine sandwich’ technique. Of these, two (14.2%) failed, requiring sub-total hysterectomy. A further case solely using the Bakri balloon required a sub-total hysterectomy, giving an overall failure rate of 7%. Mean (±SD) maternal age was 31.47 (±6.68) and Body Mass Index 27.72 (±6.01). Sixteen (37.21%) women were primiparous and the rate of induction of labour was 20.93%. Augmentation with synthetic oxytocin was used in 23.26% of cases. Mean estimated blood loss was 3400 mL and the Bakri balloon remained in situ for a mean time period of 22 hours.

Conclusion: This study demonstrates that use of Bakri balloon compression is an effective conservative strategy to control haemorrhage in massive PPH that should be more widely included in routine practice.

PP.047
Bilateral oopherectomy in suspected ovarian carcinoma in a lady with paraneoplastic cerebellar degeneration. A case report
Chaudhry, S; Mathew, D
Chesterfield Royal NHS Hospital

Background: Paraneoplastic cerebellar degeneration (PCD) is commonly associated with cancers of the ovary, breast, and lung. It is a rare nonmetastatic complication of a carcinoma. PCD typically presents as limb and truncal ataxia, along with dysarthria. It is mediated by antibodies generated against tumour antigens which are the same proteins as expressed on Purkinje cells within the cerebellum. These anti-Purkinje cell antibodies (anti-Yo) damage the Purkinje cells of the cerebellum.

Case: A 71-year-old Caucasian woman without significant medical history, developed unsteady gait, dysarthria and vertigo. Clinical examination showed signs of cerebellar ataxia. General physical and gynaecological examinations, MRI of the brain, lumbar punctures, electroencephalogram, transvaginal ultrasound, mammogram, tumor markers, anti-neuronal antibodies, whole-body positron emission tomography scan were normal. Further investigations revealed anti-Yo antibodies in the serum. The patient initially responded to plasma exchange but her ataxia worsened and she became wheelchair bound.
The multidisciplinary team recommended a bilateral oopherectomy. The histopathology did not show malignancy. The patient continues to attend neurology appointment for further search of a primary tumour.

Conclusion: PCD associated with anti-Yo antibodies affects two in every 1000 cancer patients and occurs most frequently in patients with breast and ovarian carcinomas. Presence of anti-Yo antibodies is suggestive of a gynaecological malignancy. Cerebellar degeneration with anti-Yo may be an indication for exploratory laparotomy with negative diagnostic radiographic studies. This case did not show any gynaecological malignancy, but there is a vast literature on the association of anti-Yo antibodies and ovarian cancers. Although fewer than 15% of cancer patients experience these syndromes, recognition is important because clinical manifestations of paraneoplastic syndrome can precede those of the underlying malignancy by months, or even years.

PP.048
Birth after caesarean section in obese and morbidly obese women: a 3-year experience from a tertiary unit
Mitra, A; Chandrasekaran, D; Singhal, T
Department of Obstetrics & Gynaecology, University Hospitals of Leicester, Leicester, United Kingdom

Objective: An audit was undertaken to compare rates of success and complications from birth after one caesarean section (VBAC) in obese and morbidly obese women, carrying a singleton pregnancy. These were compared with rates published in national guidelines. Complication rates between VBAC and those who had elective repeat caesarean section (ERCS) were compared.

Background: RCOG green-top guideline CG45 ‘Birth after previous caesarean birth’ quotes overall chance of successful VBAC as 72–76%, with risk of uterine rupture as 0.22–0.74%. Obesity may reduce VBAC success rate and may increase risk of primary post-partum haemorrhage (PPH). Increased rates of uterine rupture have been reported in women with BMI ≥30.

Methods: Retrospective analysis of electronic maternity records from 2009–11 at the University Hospitals of Leicester. We identified women who delivered a singleton, at term, with a booking BMI ≥30, and a history of one previous caesarean section. The cohort was split into two groups: obese (BMI 30–39) and morbidly obese (BMI ≥40). Variables analysed were rates of attempted and successful VBAC, PPH, uterine rupture and birth weight.

Results and conclusions: There were a total of 486 in our cohort: 425 obese and 61 morbidly obese women. Sixty-one percent of the cohort attempted VBAC with no difference between the groups. VBAC success rates were 53% and 55% in the obese and morbidly obese groups respectively. Major PPH was twice as likely to occur at emergency caesarean section in both groups, when compared to ERCS and VBAC. Following trial of VBAC, uterine rupture rates were 0.4% and 2.7% in the obese and morbidly obese groups respectively (P = 0.23). Overall, mean birthweight of successful VBAC was 3344 g, compared to 3466 g in emergency caesarean section group. Successful VBAC rates in our cohort were lower than those previously quoted. Although non-significant, morbid obesity was associated with increased risk of uterine rupture.

PP.049
Blood loss at caesarean section
Philip, S; Amritchett, S
Lincoln County Hospital, United Kingdom

Objective: Calculate the mean estimated blood loss (EBL) for elective and emergency caesarean sections (LSCS) at Lincoln County Hospital (LCH) and audit key aspects of LSCS at LCH associated with maternal blood loss against the current NICE guideline on caesarean section.

Background: Local audit has highlighted an increasing rate of severe PPH at LCH however the extent to which births by LCS contribute to this trend is unclear. National guidance suggests that an EBL of 1000 mL or more should occur in 4–8% of LSCS.

Methods: Of 60 LSCS cases were reviewed prospectively. Data were gathered using a pro forma and analysed using Excel. Mean EBL was calculated for emergency and elective cases. Results were compared using a two tailed students t tests, and one-way ANOVAs. Significance was assumed if P < 0.05. Audit standards were derived from the NICE clinical guideline on caesarean section, published in November 2011. Results and recommendations were disseminated within the department of obstetrics and gynaecology at LCH.

Results: Data were collected from 22 elective and 44 emergency LSCS. The mean EBL was 690 mL. Although it was slightly lower for elective LSCS compared with emergency LSCS this was not statistically significant (P = 0.2). Mean EBL was 1000 mL or more in 22% of elective LSCS and 27% of emergency LSCS. Mean EBL was significantly greater when the closure time was ≥60 min (P = 0.001). There was a trend towards a higher mean EBL when an emergency LSCS was carried at an increasingly advanced stage of labour, ‘out of hours’ and where risk factors for PPH were present though these differences were not statistically significant. There was no difference in blood loss between emergency LSCS cases carried out under regional or general anaesthesia.

The most significant audit finding was that whilst 45% of women who underwent an elective LSCS had a healthy uncomplicated pregnancy, all had a preoperative group and saved sample taken.

Conclusions: Blood loss at LSCS is higher than expected at LCH, particularly for elective LSCS. Further investigations into aspects of surgical technique that may be contributing to this problem are currently underway.
**PP.050**

**Bulimia nervosa in pregnancy: a case report**  
**Judson, A; Mulbagal, K; Tomlinson, AJ**  
Royal Bolton Hospital, United Kingdom

**Introduction:** Bulimia nervosa is a complex binge eating disorder associated with purging behaviour such as self-induced vomiting because of a concern regarding bodyweight. It predominately affects women and therefore will affect a proportion of pregnant women although its true prevalence is unknown. There is evidence of adverse obstetric outcomes in women with eating disorders although many women with bulimia will improve during pregnancy. We describe a case of bulimia nervosa in pregnancy presenting with severely deranged biochemistry.

**Case:** A 27-year-old primiparous woman of 31 weeks of gestation was referred to hospital for investigation of proteinuria. She had a blood pressure of 110/80 mmHg and 2+ protein on urinalysis. She reported symptoms of heartburn and insomnia but no classical symptoms of pre-eclampsia. Blood investigations revealed severe hypokalaemia (2.1 mmol/L), raised urate (1068 μmol/L) and raised protein: creatinine ratio (253 mg/mmol). An arterial blood gas was performed showing a metabolic alkalosis with a pH of 7.62.

On further questioning, the patient finally admitted a long history of self-induced vomiting before and during pregnancy. The patient was transferred to maternity high care for replacement of fluids, potassium, magnesium and phosphate. She was managed by a multidisciplinary team including dieticians and psychiatrists in view of the high risk of re-feeding syndrome. On day four of her admission the patient required treatment for hospital acquired pneumonia and was finally discharged on day ten.

**Conclusion:** This patient was high risk for antenatal problems relating to her bulimia due to a history of depression and a lack of social support. Ideally, she should have been referred early in her pregnancy for specialist psychiatric care to avoid complications. More awareness is needed amongst health professionals to look for signs of eating disorders.

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**PP.051**

**Caesarean section for maternal request**  
**Abdul Raheem, T; Ilyas, Z**  
University Hospital of Wales

**Objective:** To identify whether or not the department of O&G at UHW is complying with national guidelines and to calculate the incidence of caesarean section (CS) for maternal request in the unit.

**Background:** In 2004 NICE recommended that when a woman requests a CS because she has a fear of childbirth, she should be offered counselling (such as cognitive behavioural therapy) to help her to address her fears in a supportive manner, because this results in reduced fear of pain in labour and shorter labour and that individual clinician has the right to decline a request in the absence of an identifiable reason. However, the woman’s request should be respected and she should be offered referral for a second opinion.

In 2011 NICE revised this guideline and recommend that when women requesting a CS, if after discussion and offer of support (including perinatal mental health support for women with anxiety about childbirth), a vaginal birth is still not an acceptable option, offer a planned CS. FIGO committee for the ethical aspects of human reproduction has submitted that it is unethical to perform CS without medical indication, because of inadequate evidence to support a net benefit.

**Methods:** Retrospective case notes study for 1 year (between January 2007 and January 2008).

**Results and conclusions:** Number of caesarean sections (elective and emergency) between January 2007 and January 2008: 585. Of 27 cases were for maternal request (4.6%). Exclusion criteria: previous caesarean section. Of 19% were offered counselling, 7% were offered second opinion. We recommend to instigate local protocol and to distributing a leaflet among obstetrician and to re-audit in 12 months.

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**PP.052**

**Caesarean section scar pregnancy and its successful management**  
**Dangi, S; Smith, S; Kumar, M**  
Chesterfield Royal Hospital NHS Foundation Trust, Chesterfield, United Kingdom

**Objective:** Our aim is to supplement the individual case report on the rarely occurring and life-threatening condition of ectopic pregnancy developed in a caesarean section (CS) scar.

**Background:** A 35-year-old female presented with previous history of one normal delivery and two CS for breech presentation. She was known with bicornuate uterus. She came with early pregnancy in EPAU. She was referred by her GP as she requested termination of pregnancy. She had a transvaginal scan which showed a live ectopic pregnancy at the CS scar.

**Results and conclusions:** We had detailed discussions with patient on conservative versus surgical management including their risks and benefits and she opted for total abdominal hysterectomy (TAH) for removal of ectopic pregnancy.
**PP.053**

**Caesarean sections under general anaesthetic – can they be reduced?**

Rana, R; Dhingra, S; Fatima, T

Dewsbury District Hospital, Mid-Yorkshire NHS Trust, United Kingdom

**Objective:** It was identified that the number of emergency caesarean sections (CS) done under General Anaesthesia (GA) at Dewsbury and District Hospital had risen in 2012. Percentage of CS under GA was found to be higher than the target for best practice proposed by Royal College of Anaesthetists (RCOA). Hence, an audit was done to identify the possible causes for the higher numbers and to propose remedies to rectify.

**Background:** The death rate due to GA (1 per 20,000) for CS has not changed significantly from the 1982–84 triennium. One certain way of avoiding death from GA is by the substitution of an appropriate form of regional anaesthesia.

To emphasise that multidisciplinary care is required depending upon unique needs of the individual woman and care plans need to be tailored based on individual case.

**Background:** As a result of recent advances in improved quality of life and life expectancy in patients with CP, we often see women with CP attending pre pregnancy and antenatal clinics. Early anaesthetic and manual handling team input during antenatal period is vital. Majority of these women require thromboprophylaxis. Their partners/carers need to be actively involved in their care especially postpartum.

**Methods:** We have had total ten pregnancies in women with CP. Except one woman, all others were wheelchair bound. Three were delivered by elective caesarean section, two had normal vaginal deliveries, one had forceps delivery and four had miscarriages. Apart from the miscarriages, all six deliveries had reassuringly normal outcome. We extensively reviewed the literature on this subject to emphasise on the key issues involved in managing this population.

**Results and conclusions:** Pregnancy can be challenging for women with CP due to negative attitudes and bias against childbearing and parenting by women with disabilities, inadequate knowledge about their health care needs. A multidisciplinary care plan, as well as clear and effective communication among different health care providers, will help ensure safe and optimal outcome of pregnant women with CP and their newborns.

<table>
<thead>
<tr>
<th>Target set by RCOA</th>
<th>Category 4</th>
<th>Category 1 to 3</th>
<th>Category 1</th>
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<tbody>
<tr>
<td>Proposed percentage of CS to be carried out under regional anaesthesia</td>
<td>&gt;95%</td>
<td>&gt;85%</td>
<td>&gt;50%</td>
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**Methods:** Multidisciplinary audit was carried out by the Obstetrics and the anaesthetic team. A retrospective case note review was done from 1st January 2012 to 30th June 2012.

**Results:** During the audit period, 36 cases of CS done under GA were identified.

Of the total number of emergency CS, 55.26% Category 1 CS were done in GA (standard <50%) and 18.72% category 1–3 CS were done in GA (standard <15%). Four out of 24 (16%), Category 1 CS was reclassified by the Consultant as Category 2. Probably these could have been done under regional anaesthesia. Rest were done for fetal bradycardia, abruption, cord prolapse, uterine rupture, pathological CTG and warranted urgent delivery. GA was justified in these cases. Anaesthetist’s review suggested that 11% GA could be avoided by better anaesthetic management.

**Conclusion:** The only way to reduce the number of CS done under GA is by correct classification of CS and good communication with the anaesthetic team.

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**PP.054**

**Care of pregnant women with cerebral palsy**

Gajjar Dave, F; Singhal, T

University Hospitals of Leicester NHS Trust

**Objective:** Due to the scarcity of the evidence based literature for women with cerebral palsy (CP), we did case reviews of this group of women in our unit during the last 5 years to provide preliminary basis for highlighting the challenges involved in their management.

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**PP.055**

**Case report: typhoid in pregnancy**

Ansar, H; Gajjar Dave, F; Singhal, T

Leicester General Hospital, University Hospitals Leicester

**Background:** Typhoid is rare in pregnancy. It has been reported before but being rare it is important to report all cases to have collective data of its effect on pregnancy and the neonate.

**Case:** A 36-year-old African woman, known HIV, has had an uneventful pregnancy. She has been on antiretroviral therapy and presented at 38 weeks of pregnancy feeling unwell, swinging high grade pyrexia, dry cough and diarrhoea. She travelled to Africa 10 days before this illness. She was commenced on intravenous antibiotics after obtaining blood cultures but did not responded well in 2 days. Due to her recent history of travel the microbiologist and Infectious disease specialist were involved. They suspected it as typhoid and antibiotics were changed accordingly. Diagnosis was confirmed later. She was delivered by emergency caesarean section next day due to suspected fetal compromise. The baby was kept in NNU for observation with no morbidity. She made an uneventful recovery.

**Discussion:** With expanding tourism, many people are now travelling to many unreachable foreign destinations. Immigrants who return to their country of birth to visit family should be classified as vulnerable travellers. Pregnant women are at particular risk and they should be discouraged to travel to tropical areas with poor standards of hygiene. They should be counselled that they may require immunisations and prophylactic...
medications before travel. Typhoid in pregnancy can lead to miscarriage, premature labour, fetal death, neonatal infection and maternal mortality up to 15%.

**Conclusions:** Typhoid is rare in Europe. If acquired in pregnancy can lead to serious maternal and fetal consequences. It should be suspected in recent travellers and early investigations and treatment can improve the prognosis.

**PP.056**

**Case report: intestinal obstruction in a 37-year-old primigravida at 27 weeks of gestation**

Nayini, K; Mathew, D

Chesterfield Royal Hospital, Chesterfield, United Kingdom

**Objective:** Reporting a case of intestinal obstruction presenting in a primigravida at 27 weeks of gestation.

**Background:** Intestinal obstruction in pregnancy occurs in between 1 in 2500 to 3500 pregnancies. It is now more widely recognised in pregnant women and is more common in the second and third trimesters as the uterus moves into the abdomen. Intestinal obstruction is associated with significant maternal and fetal mortality. Diagnostic delay is often due to non-specific symptom presentation, making recognition difficult.

**Case:** A 37-year-old primigravida, conceived by ICSI treatment, presented at 27 weeks of gestation with acute upper abdominal pain, nausea and vomiting. The patient was initially treated conservatively for gastroenteritis and gastritis with IV fluids, anti-emetics and ranitidine. Initial abdominal ultrasound was unremarkable. She gradually deteriorated and developed coffee ground vomiting, worsening pain and constipation. Subsequent ultrasound revealed dilated small bowel loops with associated free fluid, suggestive of small intestinal obstruction. The patient received steroids and had an exploratory midline laparotomy. The small bowel obstruction was due to adhesion banding at the knuckle of the terminal ileum, which had developed following a previous appendicectomy at the age of 10 years. The surgeon performed a limited right hemicolectomy in view of the ischaemia of the caecum. The lady made a slow postoperative recovery, and was on total parental nutrition for 7 days. She was discharged 15 days later. She went into preterm labour at 34+3 weeks and had a vaginal delivery. The mother and baby were discharged without any complications.

**Conclusion:** Intestinal obstruction is rare in pregnancy. A high index of suspicion is required in patients with previous abdominal surgeries. Multidisciplinary team management is essential. Prompt surgical intervention needs to be considered if patients are not responding to the conservative management to reduce the risks and maximise the chances of favourable outcomes for both mother and baby.

**PP.057**

**Case report: Behcets disease in puerperium**

Mohan, S; Afshan, N; Griffiths, A; Sawhney, H

University Hospital Wales Cardiff, United Kingdom

**Objective:** Case report of an unusual presentation of Behcets disease detected in puerperium.

**Background:** Behcets disease is a clinically diagnosed inflammatory disorder with multi system involvement. It is rare in the UK. We present a case of a Caucasian woman who presented with the ocular manifestations of Behcets which were diagnosed and managed in the immediate postpartum period.

**Methods:** Patient review, study of case notes and literature search.

**Case:** A 36-year-old G5P2+, booked with a history of hypothyroidism and arthritis. The antenatal period was unremarkable and she delivered by caesarean section. She was then readmitted on the sixth postoperative day with sepsis. The sepsis did not respond, there was clinical worsening prompting a change of antibiotics. The patient also developed abdominal pain, watery diarrhoea, vomiting and acutely painful red eyes and reduced visual acuity. An ophthalmological review revealed severe peripheral ulcerative keratitis. Systemic steroid therapy was commenced for the keratitis. She responded well to therapy and showed clinical improvement of sepsis and the keratitis. A rheumatological review was sought and in the presence of seronegative arthritis, history of oral and genital ulcers and ocular involvement, Behcets disease was diagnosed. There are a few reports in literature about Behcets disease and pregnancy. The presence of severe sepsis presented a dilemma with regard to starting systemic steroid therapy for the keratitis. On balance, the decision was to go ahead with the steroids and indeed the patient only began to show clinical improvement after the steroid therapy was commenced supporting an immunological inflammatory basis to the pathological process. Although rare in the Caucasian population, Behcets disease can be suspected and may be first diagnosed in pregnancy or the puerperium. If diagnosed, consideration should be given to immunomodulating therapy to achieve clinical improvement as illustrated by this case.

**PP.058**

**Case series of vesicovaginal fistula in a district general hospital**

Longworth, MC; Hasan, E

Warrington DGH, United Kingdom

**Background:** The incidence of vesicovaginal fistula varies from 0.5 to 2%. The majority of cases in developed countries are secondary to bladder damage during surgery such as laceration, electrocautery damage, mechanical crushing or dissection leading to avascular necrosis. There is an association with previous caesarean section. Presentation involves involuntary leakage of urine and investigations are aimed at ascertaining the location and number of tracts present. Management via conservative approach is possible, but success rates vary greatly. Surgical intervention is the preferred treatment although techniques vary such as vaginal...
versus abdominal approach and excision versus no excision of the tract. All techniques involve the use of postoperative bladder drainage.

**Cases:** Three cases of vesicovaginal fistula following gynaecology surgery were identified in 1 year. All underwent total abdominal hysterectomy for fibroid uterus and associated symptoms of menorrhagia. All 3 cases involved intraoperative complications. The first was complicated by bleeding from the bladder base which was managed with diathermy and oxycel. The second involved extensive bleeding requiring intervention from the vascular team; however no bladder injury was identified. The final case found a fibroid pushing into the bladder and the bladder adherent to the cervix, a likely secondary complication from two previous caesarean sections. All three presented 2–3 months postoperatively with involuntary leakage of urine. They were referred onto urology and investigated to diagnose vesicovaginal fistula, and all went on to have successful surgical repair.

**Conclusion:** Vesicovaginal fistula is a rare complication of gynaecology surgery, however with increasing caesarean section rates there is potential for the incidence to rise. It must be considered as a diagnosis if there is inappropriate leakage of urine postoperatively, and urgent referral for investigation and treatment is needed.

**PP.059**

**Case study of peripartum dilated cardiomyopathy complicated by random non-sustained ventricular tachycardia**

Wong, J; Muppala, H; Wong, C; Ikhena

United Lincolnshire Hospitals, NHS Trust, Pilgrim Hospital, Boston

**Introduction:** Peripartum cardiomyopathy is a rare condition but associated with significant maternal morbidity and mortality. The Centre for Maternal and Child Enquiries (CMACE) of 2006–2008 reported that the rate of cardiac disease was 2.31 per 100,000 maternities which makes it the most common cause of indirect death as well as overall cause of death.

**Case:** A multiparous 34 year old lady presented at 36+4 weeks gestation with shortness of breath and tachycardia. There were no signs or symptoms of DVT. An ECG showed sinus tachycardia. Investigations were carried out to check for pulmonary embolism and thyroid problems. Bloods showed a thyrotoxic state and CTPA in fact showed bilateral pleural effusion. A diagnosis of cardiomyopathy was made. Multidisciplinary care involved the obstetrician, endocrinologist, cardiologist, anaesthetist and ITU consultant. She was delivered via caesarean section at 37 weeks but self-discharged from ITU 5 days post-delivery.

**Conclusion:** Patients and clinicians alike may dismiss symptoms of cardiomyopathy because they appear to be typical of a normal pregnancy. Diagnostic difficulty may be encountered due to the rarity of the condition causing it to be a late consideration in a diagnostic work-up. These factors may lead to delay in diagnosis and management and may impact on a woman’s morbidity and mortality. Early multidisciplinary involvement is key in saving mothers’ lives.

**PP.060**

**Case study: a rare complication of a copper IUD**

Gossage, K; Langley, C; Abdel-Aty, M

East Lancashire Health Trust – The Lancashire Women and Newborn Centre

**Objectives:** To discuss a case of disseminated intravascular coagulation following insertion of a copper IUD, with review of the current relevant literature.

**Background:** A 37-year-old woman had a copper coil IUD inserted seven months after vaginal delivery of her fourth child. Five days later she attended the emergency department in haemodynamic shock secondary to massive haemorrhage per vagina. On examination the cervix was closed, but she continued to bleed heavily. Initial resuscitation manoeuvres and treatment with tranexamic acid were unsuccessful; she was transferred to the operating theatre. Cervical dilatation and curettage was carried out and the copper IUD was removed. A Bakri intrauterine balloon was inserted and bleeding settled. Preoperative bloods were consistent with a diagnosis of disseminated intravascular coagulation. Estimated total blood loss was 1500 mL. She required extensive resuscitation with blood products, adhering to the Trust’s major haemorrhage protocol. No specific cause for the bleeding was identified. She made a full recovery and was discharged home 2 days later.

**Results and conclusions:** Menorrhagia is a well documented early side effect of the copper IUD. Blood flow during a period can increase up to 50% and menorrhagia the most common cause for IUD removal prematurely. Menorrhagia may be secondary to the increased activity of plasminogen activators or increased prostaglandins. A study of hysterectomy specimens found chronic endometrial damage by the copper IUD results from increased vascularity, congestion and degeneration with defect formation and necrosis. Similar cases to the one described seem to be rare, and this case adds to the current literature regarding complications of copper IUDs.

**PP.061**

**Causes of stillbirth and postmortem uptake rate in patients at Kingston Hospital**

Hodgkinson, S; Ramalingam, K; Breeze, A

Kingston Hospital NHS Trust, United Kingdom

**Objective:** To audit the uptake rate of postmortems among patients who have had a stillbirth against RCOG’s recommended rate of 75%. To audit the rate of placental histology, recommended as a valuable tool in assessing stillbirth where postmortem consent is declined. To ascertain the most common causes of stillbirth in this population and the percentage of cases with no known cause found.

**Background:** Stillbirths are the most common cause of perinatal mortality. The importance of postmortem in establishing the cause is emphasised by RCOG’s recommendation of an autopsy rate of >75%.
Methods: Intrauterine deaths (IUD) over 24 weeks of gestation during the last 3 years were identified from an electronic database. Case notes were checked against the electronic patient record. Risk factors for stillbirth, postmortem uptake, results and outcomes as classified by Tulip classification were recorded.

Results and conclusions: Forty-one of 66 cases (62%) underwent postmortem. 60 of 66 cases (91%) had placental histology. A cause for IUD was found in 78% undergoing postmortem, compared to 48% who did not. Placental factors were causative in 38%, chromosomal abnormalities in 11%, structural abnormalities in 15%, infection in 6%. Of 33% were 'unknown', 12% despite a post-mortem. Post-mortem is more likely to find a cause. In 66% of post-mortem cases the cause was known from placental histology, diagnostic tests (e.g. CVS) or fetal medicine scans. However, complete postmortem examination excludes other causes which may have an impact on maternal health and future pregnancies. It is also important to know the cause for the grieving process for parents and for appropriate counselling. All parents under these unfortunate circumstances must be offered a postmortem. If declined, their wishes must be respected and a diagnosis sought with other available tests.

PP.062
Cervical herpes – case presentation
Kuratishvili, N; Marcus, N
King’s College Hospital NHS Trust, London

Objective: To present a rare case of herpetic cervicitis in which colposcopy played a key role in establishing diagnosis.

Background: Genital herpes is the second most common STD in the UK after Chlamydia. However cervical presentation of genital herpes is very rare. Few modern textbooks of gynaecology or cervical pathology mentions herpetic cervicitis, thus we consider the following report worthwhile.

Case: Of 19-year-old, Para 1, black African lady was referred from sexual health clinic with urgent referral due to abnormal looking cervix, suspicious for malignancy. Patient was smoker, no significant pass medical history, no history of STD. Never had a cervical smear test before. On colposcopy, vulva and vagina were normal with abnormal looking cervix. Impression – chronic cervicitis. Cervical smear, HVS and biopsy were taken. HVS came back negative. Biopsy showed multinucleated giant cells, which had ground – glass appearance of nuclei, suggestive of herpes simplex infection. No evidence of HPV, CIN, CGIN or invasive carcinoma. Smear did not relieve dyskaryosis; changes were inconsistent with cervical herpes simplex.

Discussion: Both serotypes of HSV (HSV-1 and HSV-2) can cause genital tract lesions. Of women with their first episode of HSV-2 infection, 70–90% has herpetic cervicitis as part of the manifestation. Primary herpetic cervicitis frequently is asymptomatic; however, it may present as a purulent or bloody vaginal discharge. Burning pain into the vagina, dysuria, and dyspareunia, abdominal and back pain also can be associated with cervical herpes. Grossly, the cervix may appear diffusely red and friable. At times, ulcerations, which may be extensive, are present on the ectocervix.

Conclusion: Making a clinical diagnosis may be difficult. Colposcopic findings of acute cervicitis are identifiable in two thirds of women with primary cervicitis. Multinucleate cells with typical ground-glass inclusions may be identified on cervical cytology results in 60% of these women.

PP.063
Chronic pelvic pain – an unusual presentation of enterobiasis
Uttley, J; Gbadamosi, J; Biswas, S; Cuckson, C; Sieunarine, K
Kettering General Hospital, NHS Foundation Trust, United Kingdom

Background: Enterobius vermicularis is commonly known as a threadworm (UK) or pinworm (USA). Threadworm infestation (enterobiasis) is the commonest childhood helminth infection. Predominantly affecting the intestinal tract, it causes: night-time pruritus ani, insomnia, restlessness and decreased appetite. However, ectopic spread to the female genital and urinary tract is possible. At night, the females migrate to the anus to lay their eggs. They may then erroneously travel to the female genital tract, causing vulvovaginitis and pruritus vulvae. Further ascending migration can occur, reaching as far as the peritoneal cavity.

Case: In the outpatient clinic, a 30-year-old Caucasian female with two children presented with disconcerting chronic left-sided pelvic pain and sleeping problems. She had a 3-year history of recurrent ovarian cysts that were treated laparoscopically on two occasions. She had been amenorrhoeic for 5 years following a Mirena® coil insertion. Observations were normal. Abdominal examination revealed tenderness in the left iliac fossa. This pain had resulted in two recent acute admissions to the emergency department, for which analgesia was prescribed. Imaging and laboratory investigations revealed no obvious cause for the pelvic pain symptoms. Adhesions or endometriosis of the left ovary and pelvis were presumed the most likely causes, due to her past surgical history and also her strong family history of endometriosis. A 3-month course of a GnRH analogue treatment resulted in symptomatic improvement. Diagnostic laparoscopy with adhesiolsis and a left salpingo-oopherectomy were performed. Histopathology reported a granulomatous lesion with a focus of necrotic tissue in the ovary containing a female enterobius worm and calcified eggs. Antihelmintic agents were given to the patient and her close contacts successfully. Complete resolution of her chronic left-sided pain was achieved.

Conclusion: Ectopic enterobiasis infections of the ovary may be an unusual but recognised cause of chronic pelvic pain.
Clinical audit of the management of third and fourth degree perineal tears over a period of 1 year (January–December 2012)

Omer, R
Dorset County Hospital (DCH), Dorchester, United Kingdom

Objectives: To conduct a comprehensive audit examining risk factors, incidence and management of patients with third and fourth degree perineal tears, in order to highlight any deficiencies so that corrective action may be taken. To determine adherence to the guidelines issued by the Royal College of Obstetricians and Gynaecologists in 2007.

Background: Obstetric anal sphincter injury encompasses both third and fourth degree perineal tears. Third degree: Injury to perineum involving the anal sphincter complex: 3a: <50% of EAS thickness torn, 3b: More than 50% of EAS thickness torn, 3c: Both EAS and IAS torn.

Fourth degree: Injury to perineum involving the anal sphincter complex (EAS and IAS) and anal epithelium.

Methods: Data were collected from the statistics department and theatre register. Total 36 patients identified (32 patients with third degree tear, four patients with fourth degree tear). Audit pro-forma, designed to include both risk factors and audit tools suggested in the local guideline, was used for retrospective data collection.

Results and conclusions: Incidence of third and fourth degree tear in DCH in 2012 is 2.2%. Type of injury: 3a: 28%, 3b: 57%, 3c: 5%, fourth degree tear: 8.5%. Risk factors: birth weight over 4 kg(9%), nulliparity (39%), induction of labour (12%) epidural analgesia (14%), second stage longer than one hour (17%), shoulder dystocia (5%), forceps delivery (7%).

Suture material: EAS: PDS 3-0: (90%), Vicrly 2-0: 10%. IAS: PDS 3-0: 100%. Rectal mucosa: Vicryl 2-0: 100%. Method of repair: 57% an overlap technique, 43% end to end technique.

One hundred percent of patients with third degree tears had their repair done in theatre by consultant or senior registrar and 100% of patients with fourth degree tear had their repair done by consultant all in theatre under regional anaesthesia. Postoperative management: prophylactic antibiotics: 100%, postoperative laxatives: 100%, hygiene advice: 100%, thromboprophylaxis: 80%, referral to physiotherapy: 70%, follow-up after discharge 65%. In summary, overall management coincides with RCOG recommendation. Risk factors like induction of labour may be modified to reduce the rate of injury to 1% which is the overall incidence in UK.

Collapse in pregnancy: HHT and pulmonary haemorrhage requiring emergency thoracotomy – a case report

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Introduction: Hereditary haemorrhagic telangiectasia (HHT) is an autosomal dominant condition affecting 1 in 5–8000 Europeans. It is characterised by recurrent nosebleeds, mucocutaneous telangiectasia and arteriovenous malformations (AVM). Most affected people are unaware of their diagnosis as symptoms may not present until later in life.

Case: A 32-year-old woman known to have HHT was referred to our obstetric haematology clinic. Her diagnosis had been confirmed in 2001 following a significant haemoptysis requiring embolisation of a pulmonary AVM. In the first trimester she reported an increase in the frequency and severity of her nosebleeds. This was initially treated with nasoepin cream but subsequently required open access to the ENT on-call team. At 24 weeks gestation she presented to Accident and Emergency with chest pain and respiratory compromise. Examination revealed a deviated trachea with reduced air entry on the left side and dullness to percussion. Chest X-ray confirmed mediastinal shift and a CT demonstrated a large left haemothorax with contrast filled lesions on the surface of the collapsed lung. She was taken to theatre for an emergency thoracotomy and 3 L of blood was evacuated from her chest. The bleeding lesion was managed with stapled wedge excision to provide haemostasis. She made an uneventful postoperative recovery and continued her pregnancy with regular input from obstetrics, cardiothoracics, haematology and ENT. She was delivered by elective caesarean section at 37 weeks with steroid cover.

Discussion: Pregnancy outcomes in patients with HHT are rarely reported because many patients do not have their diagnosis confirmed prior to pregnancy. In HHT, whilst the vast majority of pregnancies proceed uneventfully, the maternal mortality rate has been quoted to be as high as 1%. This case highlights the possible complications of HHT in pregnancy.

Combined mucinous cystadenoma and carcinoid tumour of the appendix with coexistant features of an endometriosis: a case report

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Background: Appendiceal cancers are rare tumours of the gastrointestinal tract. We report the unique case of an appendiceal cancer (combined mucinous cyst adenoma and carcinoid tumour) with coexistant histological features of endometriosis found in a women presenting with infertility.
Case: A 36-year-old nulliparous woman was referred to clinic with primary infertility, with an unremarkable past medical history. After routine infertility investigations, diagnostic laparoscopy was carried out and endometriosis was diagnosed. A suspicious lesion was biopsied on the appendix. Histology indicated a possible carcinoma and a right hemicolecctomy was performed. Hemicolectomy histological results showed mucinous cystadenoma with a well differentiated carcinoid tumour and coexistent features of an endometriosis.

Results and conclusions: An association between endometriosis and cancer has been documented in literature. Existence with appendicical cancers is rare. Carcinooids and cyst adenomas are both common types of appendical tumours, often found incidentally when mimicking acute appendicitis. Occurrence in the same lesion is rare and unique to be found with features of endometriosis. This case illustrates the broad spectrum of appendicical and endometrial disease. We hope to highlight the interesting asymptomatic presentation of this patient and therefore the importance of viewing the whole abdomen during diagnostic laparoscopy.

PP.067
Complication rates for elective caesarean section: hospital specific consent counselling
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University Hospitals Leicester

Objective: To evaluate data for all women who have undergone elective caesarean section (CS) over an 8 years period to enable us to accurately state the risk of various complications of caesarean in order to enable us to better counsel women who are requesting caesarean without obstetric indication.

Background: New NICE guidance suggesting that women should be able to have a caesarean section at maternal request with no obstetric indication. In light of new guidance; we expect to see more patients in clinic requesting a caesarean without obstetric indication. The new changes in the NHS are promoting more specific information to the patient before considering elective procedure. We aim to provide our patient hospital specific complication rate.

Methods: Retrospective analysis of all data covering all elective CS performed during years 2003–2011, software systems used for data collections and notes reviewed wherever necessary. The data were compared with Royal College of Obstetricians and Gynaecologists (RCOG) consent advice.

Results and conclusions: We analysed 2650 patient over period of 8 years operated at a teaching hospital. We analysed all elective caesarean sections. Risk of significant haemorrhage (>1.5 L) was 37.36 per 1000 which is higher than quoted in RCOG consent advice. The risk of bladder injury or bowel injury was 1–2 per 1000, the risk of accidental injury to baby was 1–2 per 1000. The risk of emergency hysterectomy was 3 per 1000. It’s vital to have patient counselling quoting local risks to make informed decisions when CS is requested by the woman as choice. This study provides more specific information to the patients.

PP.068
Congenital heart block: management dilemmas in a District General Hospital
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Background: Congenital heart block (CHB) can present as abnormalities in the fetal heart at any gestation. CHB is rare, incidence 1:15,000–20,000, but carries significant morbidity and mortality. Neonatal lupus erythematosus accounts for 90–99% of all cases prior to 6 months and is associated with transplacental passage of maternal autoantibodies, anti-Ro and anti-La. Babies diagnosed prenatally have an increased mortality compared to those diagnosed postnatally. Knowing when to arrange an in utero-transfer or initiate early delivery can be difficult and especially challenging when presenting to a non-tertiary unit. We present two cases of CHB detected at 29 and 35 weeks, necessitating early delivery.

Case 1: At 29+2 a primigravida presented with abdominal pain, the fetal heart was heard on auscultation, and then ultrasound and fetal echo showed complete heart block, rate 40 bpm, with severe fetal hydronephrosis and ascites. The patient was transferred to a tertiary centre and delivered after counselling regarding poor fetal prognosis. The baby underwent cardiac pacing following delivery; the smallest gestation paced at Birmingham Children’s Hospital.

Case 2: At 35+10 a G2P1 presented with tightening’s and on auscultation fetal heart rate was 56–60 bpm, ultrasound revealed suspected complete heart block, the decision was taken to deliver by emergency CS. Postnatally the diagnosis was confirmed, the baby was observed on the neonatal unit and is currently being monitored in the community.

Dilemmas: CHB is an important differential diagnosis to consider when faced with an unexpected fetal bradycardia. We would like you to consider the following dilemmas if you were to encounter a case like the above:

- What to do when presented with a persistent fetal bradycardia?
- How do you monitor these babies?
- Is delivery always the answer?
- Should you arrange in utero-transfer or deliver in a district general hospital?

PP.069
Conservatively managed cervical adenocarcinoma in a young woman desiring fertility – a case report
Smitharaghavan, MV; Arutchelvam, S; Robertson, A; Doxford, L
North Tees and Hartlepool NHS Foundation Trust

Background: The rate of adenocarcinoma of the cervix is increasing, especially in women of reproductive age group on oral contraceptives. Traditionally the treatment for cervical cancer was hysterectomy. This would affect the women desiring fertility and hence conservative management is increasingly being adopted. We
report a case of villoglandular adenocarcinoma, in a young nullipara managed with fertility sparing surgery.

**Case:** A 22-year-old nulliparous woman with history of post coital bleed of 4 months duration was referred to the gynaecologic rapid access clinic. A cervical biopsy for suspicious looking cervix revealed a diagnosis of ‘high grade papillary cervical glandular intraepithelial neoplasia and superficial villoglandular variation of endocervical adenocarcinoma with no stromal invasion’. The urgent LLETZ biopsy done was reported as ‘incompletely excised endocervical villoglandular adenocarcinoma without stromal invasion, in a separate relatively tiny fragment and not in main LLETZ’. The final staging was FIGO 1A1, with a small possibility of IB1. The patient was counselled about the difficulty in staging and hence the dilemma in most appropriate management. Options of management were discussed including conservative and laparoscopic pelvic lymphadenectomy. She decided and underwent laparoscopic bilateral pelvic lymphadenectomy. All lymph nodes were negative.

She was found to be pregnant during follow-up. She was reviewed in antenatal and colposcopy clinic throughout her pregnancy. She had a preterm premature rupture of membranes at 36 weeks, went into spontaneous labour and delivered a live healthy baby, normally. Postnatal colposcopic follow-up was normal.

**Conclusions:** Conservative management of adenocarcinoma of cervix is an option in carefully selected women desiring fertility. Experience in colposcopy, is mandatory to achieve the best balance between the maximum eradication rates and the minimum disruption of cervical anatomy. Hence treatment should be undertaken by experienced clinicians. Long term follow-up should be initiated, to pick up recurrences.

**PP.070**

**Contraceptive choices of women undergoing a surgical termination of pregnancy**

**Bhoompally, A; Saeed, BZ; Putran, J**

Princess Alexandra Hospital NHS Trust, Harlow, United Kingdom

**Objective:** The aim of the study was to assess the contraceptive choices of women undergoing a surgical termination of pregnancy (STOP). It also aimed to find out uptake rates for the long acting reversible contraceptive (LARC) methods.

**Background:** Termination of pregnancy is one of the commonest procedures performed in Great Britain. The total number of terminations carried out in England and Wales in 2011 was 196,082. The National Institute of Clinical Excellence has recommended the use of LARC methods to reduce rates of unplanned pregnancy.

**Methods:** This was a retrospective audit of women attending the Unplanned Pregnancy Unit at the Princess Alexandra Hospital. The audit looked at theatre notes from January to December 2012.

**Results:** Of 195 women attended the Unit in that year. Fifty-one women opted for a STOP. One patient was under age of 15 years and opted for a Nexplanon insertion. Nineteen were in the age group 15 to 20 years. Thirteen women had the Nexplanon inserted, one patient had the depo provera injection (POI), two the combined oral contraceptive pill (COCP) and three were undecided. Of the 19 patients in the 21 to 30 age group, eight opted for the Nexplanon, five for IUD/IUS, three for COCP, one for POI and two were undecided. Of the 11 patients in the 31–40 age group, four opted for COCP, three for IUD/IUS, one for barrier method, two for Nexplanon and one was undecided. The one patient who was more that 40 years opted for an IUD.

**PP.071**

**Cornual ectopic pregnancy after bilateral salpingectomies**

**Gbadosi, J; Malik, S; Uttley, J; Biswas, S; Sieunarine, K**

Kettering General Hospital, United Kingdom

**Background:** The incidence of ectopic pregnancy in the UK has been increasing due to sexually transmitted infections, particularly in the 18–25 age group. More than 80% of ectopics are located in the fallopian tubes and often treated by a salpingectomy. Also increasing in incidence are cornual or interstitial ectopic pregnancies which are located in the intra-mural part of the fallopian tube. They account for <5% of ectopics, however are associated with a high risk of morbidity and occasionally mortality.

**Case:** We present a case of a cornual ectopic pregnancy in a patient with bilateral salpingectomies following a presumed failed IVF cycle. She is a 36-year-old woman with a history of subfertility, three past ectopic pregnancies, four miscarriages and bilateral salpingectomies. The patient had undergone an IVF cycle 2 months previously with a negative urine pregnancy test and a withdrawal menstrual bleed. She then presented with right iliac fossa pain and a positive pregnancy test 4 weeks after the initial negative urine test. Ultrasound scan revealed no intrauterine pregnancy and a pregnancy of unknown location was diagnosed. Surgical review resulted in the patient being taken to theatre for presumed appendicitis. An initial laparoscopy proceeded to open laparotomy that revealed a ruptured right cornual ectopic pregnancy with approximately 2 litres of intraperitoneal blood. She was managed with a wedge resection and oversowing of the right cornu. She made a full recovery.

**Discussion and conclusion:** This case emphasises the importance of vigilance in patients with a past history of ectopic pregnancies, past tubal surgery and IVF treatment even in cases of bilateral salpingectomies. The initial pregnancy test was a false negative. Cornual pregnancies usually present around 8–10 weeks of gestation or even later due to the <5 mm surrounding myometrial support and having a high index of suspicion is paramount.
PP.072

Day case surgery: ovarian cysts

Yorke, J; MacNab, G

Sunderland Royal Hospital

Objective: To review if we were meeting the standard set by BADS: laparoscopic oophorectomy and salpingectomy (including bilateral) should be carried out as a day case procedure in 95% of cases. Currently 46.4%.

Background: Day surgery: patients must be admitted and discharged on the same day. It is known that shortened hospital stays and earlier mobilisation reduce the risk of: hospital-acquired infections and venous thromboembolism (VTE). Roughly an inpatient day cost is £225. By maintaining a high percentage of day case discharges it will keep hospital costs down, while improving patients postoperative recovery.

Methods: All elective oophorectomy/cystectomy over 2 years were included in the audit. Further data gathered from the hospital computer system. Data analysed using Microsoft Excel.

Results and conclusions: Altogether a total of 88 cases of laparoscopic oophorectomy or cystectomy. Our results showed that 61% of patients were discharged the day of surgery. With 24% discharged day 1, 6% over 48 hours. Eight percent of cases were converted to open surgery- accounting for some of the longer admissions. There were 17% cases admitted for reasons as post operative pain, needing a GKI or trial without catheter. Reviewing these cases it is possible with more preparation and explanation about the recovery with the patient that these prolonged admissions could have been avoided. When reviewing the surgical codes used within the hospital database, previously if an oophorectomy was performed alongside another surgery, for example hysterectomy, this was put down as a second procedure, but still used for the day case calculations. This has since been discussed and ratified. Overall 95% is a high target to meet, but after reviewing these data it is felt that some changes can be made within the department, both pre and postoperative, to aid in improving discharge of day cases.

PP.073

Deep venous thrombosis and teenage pregnancy: a case report

Goodwin, A1; Brewer, C2; Koutsogianni, M2; Millman, G2

1University of St Andrews School of Medicine; 2York Teaching Hospitals NHS Foundation Trust

Case: Thromboembolism remains a leading cause of pregnancy associated morbidity and mortality. We present the case of a 15-year-old, who at 22 days postpartum, was admitted with ultrasound confirmed deep venous thrombosis (DVT) extending from the right popliteal to external iliac vein. Despite initial treatment with compression stockings, low molecular weight heparin and therapeutic doses of warfarin, she represented several days later with further DVT extending from the left common femoral through the external iliac vein to the distal inferior vena cava. Respiratory symptoms were absent but CT pulmonary angiography demonstrated bilateral thrombus in the pulmonary arteries. The patient admitted to immobility and non-adherence to treatment following the initial DVT. An inferior vena cava filter was inserted and she remains anticoagulated with subcutaneous heparin five months post presentation. Heterozygosity for Factor V Leiden gene mutation has been confirmed.

This case raises three main issues, firstly the need for vigilance when assessing teenagers in the postpartum period, as significant DVTs are a potentially fatal complication of teenage pregnancy but uncommon presentations to general paediatricians. Secondly, patient management was further complicated by her placement on a paediatric ward within an adult focussed multidisciplinary team of obstetricians, hematologists, vascular surgeons and interventional radiologists. This led to communication and coordination of care difficulties between the various teams thus highlighting the need for a nominated clinician to lead successful management of the patient.

Thirdly, non-adherence to treatment in teenagers is a well-documented problem and the patient and parents should be counselled accordingly when commencing therapy to avoid potential life threatening complications. Clinical features suggesting thrombus extension must be considered and investigated promptly.

PP.074

Diagnosis and management of unstable lie in pregnancy

Szaboova, R; Sankaran, S

St Thomas’ Hospital, London

Objective: The aim is to determine current practice in the management of women admitted to St Thomas’ Hospital with diagnosis of unstable lie. We will compare this to the current RCOG guidelines and aim to create new guidelines based on a higher level of evidence.

Background: Unstable lie is defined as fetal lie which repeatedly changes after 37 weeks of gestation. The RCOG guideline on its management is based on a low level of evidence. It recommends offering antenatal admission for unstable lie after 37+6 weeks of gestation but no specific recommendations regarding further management.

Methods: A retrospective study was conducted analysing outcomes of patients admitted with unstable lie at St Thomas’ Hospital, London in 2012. The diagnosis was based on a changing fetal presentation on abdominal or ultrasound examination in the third trimester of pregnancy.

Results and conclusions: Fifty-seven cases of unstable lie were included in the study, with 54% admitted before 38 weeks. The average length of admission was 7 days (IQR 4–10). The lie permanently stabilised to cephalic without intervention in 28%. The most common mode of delivery was caesarean section (75%) at a median gestation of 39+3 weeks (IQR 39 to 39+6). Half of the cases of elective caesarean section had a cephalic presentation at
Prolonged admission is expensive for the NHS and inconvenient for the patients. It may lead to these women requesting earlier delivery, hence increasing caesarean section rate. If there are no other contraindications to vaginal delivery, it is prudent to wait until 41–42 weeks to allow spontaneous version and possible vaginal delivery.

PP.076
Documentation of day 1 check post caesarean section
Saunders (nee Adams), Z; Ahmed, I; Boylett, V; Pennekett, J
Wessex Deanery – Salisbury, Dorchester, Poole, Basingstoke

Objective: All women undergoing caesarean section should have a day 1 post operative check. This should include assessment of general wellbeing, haemoglobin check, bladder care, venous thromboembolism risk, wound care, lochia, examination, provision of advice and recommendations for ongoing care. The aim is to ensure day 1 post operative checks are performed and that they are consistent across the region in order to improve the level of care provided to women postoperatively, to identify those at risk of postoperative complications and to intervene early in order to improve patient safety.

Methods: An audit pro forma was created and used to retrospectively review 40 case notes from 4 units across the Wessex Deanery. Participating hospitals included Salisbury, Poole, Dorchester and Basingstoke (10 patients/unit). If a day 1 check was performed it was noted whether category of caesarean, general observations, haemoglobin check, bladder care, venous thromboembolism risk, wound care, lochia, examination, advice given and recommendations for ongoing care were documented.

Results and conclusions: Only 27 out of 40 patients (68%) received a day 1 post-op check. Vital signs, abdominal examination, EBL and mobility status were well documented however VTE symptoms and prophylaxis, lochia, wound care and pain control were not. Although 100% of cases had a clear ongoing care plan, the provision of advice, including VBAC, recovery, contraception, breast feeding and driving, were poorly documented. A Day 1 check pro forma was implemented in four units across the region. Second round data collection has shown 93% of women received a day 1 check, all parameters were well documented except for pre-op HB (30%), there was a dramatic improvement in advice given on contraception, recovery and driving. Feedback from staff has been extremely positive. We aim to introduce the pro forma in all units to standardise care across the region and reaudit in 6–12 months.

PP.077
Does a rise in serum vitamin D level improve semen parameters?
Gudipati, M; Pearce, K; Hemingway, V; Nowak, L; Pearce, S; Stewart, JA; McEleny, K
Newcastle Fertility Centre at Life, Bioscience Centre, Centre for Life, Times Square, Newcastle upon Tyne, United Kingdom

Objective: We aimed to investigate if there was a correlation between serum vitamin D levels and semen parameters. Our objectives were to identify any improvement in semen parameters with the seasonal rise in serum vitamin D levels or with vitamin D supplementation.
Background: Vitamin D is known classically for its role in calcium homeostasis and bone integrity, but research revealed the widespread presence of vitamin D receptors (VDR) in the human body revealing its potential diverse role in human physiology. Vitamin D deficient rats and/or VDR knockout mice show low sperm count, decreased sperm motility and impaired fertility. As VDRs/metabolising enzymes are expressed in the human male genital tract, a role for Vitamin D in human spermatogenesis has been suggested.

Methods: Of 125 men attending our fertility unit were recruited to this prospective cohort study and had a semen analysis/serum vitamin D level performed. 69.6% of the participants returned for follow-up 6 months later when the investigations were repeated. Vitamin D deficient participants received supplementation in the interim.

Results and conclusions: Serum vitamin D levels were deficient in 52 men (41.9%), insufficient in 51 (41.1%), adequate in 15 (12%) and optimal in 6 (4.8%). There was no significant difference between semen parameters among the four vitamin D groups (Multiple linear regression analysis $P > 0.05$ although the numbers of men in the adequate/optimal group were low. Semen parameters (sperm concentration, total count, motile concentration, progressive motility, total motility and morphology but not semen volume) declined significantly (paired sample $t$ test $<0.05$) in the 36 vitamin D deficient men who received supplementation and also in the 48 vitamin D non deficient men who had a seasonal rise in their vitamin D level. Whether this is just a seasonal phenomenon or vitamin D has a negative association with semen parameters is unclear and further studies are warranted.

PP.078
Endometrial biopsy and MRI as pre-operative predictors for invasive disease in endometrial cancer: experience from two centres
Mitra, A; Chandrasekaran, D; Lakhani, A; Davies, Q; Duncan, A

Objective: To evaluate the use to endometrial biopsy and MRI in predicting final histology and stage of endometrial cancer.

Background: Endometrial carcinoma is the commonest gynaecological malignancy in UK and the incidence is rising. Preoperative histological grading is used to identify patients who are at higher risk of invasive disease. Current radiological guidelines recommend triaging women at risk of high grade disease for preoperative MRI Pelvis. Preoperative staging is often used to triage high risk patients to include pelvic lymphadenectomy as part of primary surgery.

Methods: Retrospective analysis of electronic patient records at two centres. Women diagnosed with endometrial carcinoma who underwent primary surgery were identified. Uterine sarcomas were excluded. Endometrial biopsy was categorised as low risk (grade 1 endometrioid) and high risk (all others). Final histology was grouped into Type I (Endometrioid G1/2) and Type II (endometrioid G3, serous, clear cell, carcinosarcoma). Preoperative histology and MRI staging were compared with final histology and staging.

Results and conclusions: A total of 247 cancers were analysed, of which 80 had preoperative MRI. MRI pelvis gave sensitivity of 66%, specificity 81%, and diagnostic accuracy 74%, in predicting myometrial invasion. This is comparable with published national averages. Initial histology showed sensitivity of 75%, specificity 58%, and diagnostic accuracy 63% in predicting type of endometrial cancer. Using preoperative histology to predicting stage of disease of ≥1b showed a sensitivity 66%, specificity of 61%, and diagnostic accuracy 63%. Our results show preoperative endometrial sampling is a poor predictor of subtype of endometrial cancer. MRI Pelvis should not be reserved for women who have higher grade cancers on initial histology, because we have shown this frequently underestimates disease severity.

PP.079
Factors influencing self-motivated participation in a cervical cancer screening program in Sri Lanka: a case control study
Silva, GRC; Wijesinghe, RD; Adikaram, DRS; Kajendran, J; Ranaraja, SK; Waduge, RN

Objective: Our objective was to analyse the factors associated with participation of healthcare workers in a cervical cancer screening program.

Background: Universal screenings have significantly reduced the disease burden due to cervical cancer. But multiple socio-cultural factors influence the self-motivated participation.

Methods: A case control study was conducted among participants of a cervical cancer screening program (cases) organised by the Teaching Hospital Peradeniya for the staff members and occupation matched controls using a self-administered questionnaire. Odds ratio was used for data analysis.

Results: Of 222 cases and 144 controls participated for the study. Health care assistants (48.2% $n = 107$) and nurses (28.4%, $n = 63$) were the two commonest occupational groups to be participated in our program. Participation of the doctors remained lowest at 1.4% ($n = 3$). Among cases, 38.9% ($n = 84$) recognised the correct clinical features of cervical cancer, while controls showed a higher result of 50.7% ($n = 73$) (OR 0.619, CI 0.404–0.948). In the group who participated in the program, 65.9% ($n = 143$) was aware that Pap smear can detect premalignant lesions while it was comparable at 70.8% ($n = 102$) among controls. (OR 0.796, CI 0.504–1.255).

The most common reason to develop an interest to participate in this program was the easy accessibility (48.7%, $n = 101$). In both groups, the most common reason for not getting a Pap smear done was fear of vaginal examination, contributing to 22.9%...
(n = 51) of the cases and 55.5% (n = 80) of the controls. The second commonest reason in the cases was lack of clinical features (22.9%, n = 51) while fear of pain (13.1%, n = 19) came in the second among the controls.

Conclusion: In conclusion, self-motivated participation in a Pap smear programme in a developing country with socio-cultural barriers was mainly influenced by the reluctance to undergo vaginal examination and fear of pain. Improved accessibility of screening can improve the participation. Further studies are needed to apply this to the general population.

PP.080
Gestational trophoblastic disease: a diagnostic conundrum?
Soffer, K; Greer, O
Luton and Dunstable Hospital

Objective: To review diagnostic difficulties within the context of Gestational Trophoblastic Disease (GTD).

Background: GTD encompasses a spectrum of early pregnancy conditions characterised by abnormal development of the ‘conceptus’. They include the premalignant partial and complete hydatidiform moles (PHM and CHM) and the malignant conditions: invasive mole, choriocarcinoma and placental site trophoblastic tumour. GTD, managed via a specific care pathway carries an excellent prognosis. The diagnostic gold standard is histological with concurrent genetic analysis, however, partial moles can be missed due to difficulties differentiating the pathological from the normal conceptus.

Case: An 18-year-old lady diagnosed with a missed miscarriage was found to have GTD secondary to PHM. A dating ultrasound scan demonstrated fetal oedema, a large placental site with cystic spaces, but no colour flow. Together with a serum ß-hCG of 200,000 IU/L the diagnosis was suggestive of PHM. Surgical evacuation of retained products of conception (ERPC) was performed with histological analysis detailing no evidence of GTD. No follow-up was arranged. The patient re-presented with vaginal bleeding, abdominal pain and fever. The working diagnosis was endometritis, secondary to retained products of conception (RPOC). ß-hCG level was elevated at 14,798 IU/L. Repeat pelvic ultrasound scan demonstrated fundal vascularity with apparent myometrial invasion suspicious of an arterio-venous malformation. An MRI scan suggested the presence of heterogeneous enhancing endometrial contents (consistent with RPOC) and no evidence of myometrial invasion. Repeat ERPC yielded tissue that on histological analysis indicated the presence of abnormal hydropic chorionic villi showing early cisterns, confirming PHM. The patient was referred to a tertiary trophoblastic screening centre for follow-up.

Conclusions: Our case highlights the difficulties arising in histological analysis of GTD, looking at biotechnological tools, including immunohistochemistry and molecular genotyping, that supplement the current diagnostic repertoire in its management.

PP.081
Group A Streptococcus (GAS): time to realise its danger in gynaecology
Eissa, A; Tvarozkova, K; Wright, A
Royal Free Hospital, London, United Kingdom

Background: Group A Streptococcus (GAS) infection has received attention for its fatalities in obstetrics and was cited in the last CMACE Report. It is associated with toxic shock syndrome (STSS) in about 14% of cases and a mortality of 33–81%.

Case 1: A previously healthy 34-year-old sex worker, who speaks limited English, presented with abdominal pain, fever and vomiting. Three foreign bodies were retrieved from the vagina; these later were found to be folded up baby wipes. A uterine prolapse, was noted, without ulceration and pelvic mass was felt. Urine pregnancy test was negative. Arterial blood gas analysis showed severe metabolic acidosis and deranged laboratory markers. Ultrasound showed free fluid, bilateral complex cystic adnexal masses.

Resuscitation and antibiotics therapy were commenced. Blood cultures grew GAS and the antibiotics were changed to include Amikacin and Teicoplanin. The woman deteriorated further and laparotomy with bilateral salpingectomy was performed. Subsequently she made a good recovery and left hospital on day 11 and did not attend her follow-up appointments.

Case 2: A previously fit 26-year-old Solicitor presented with fever, flu like symptoms, rigors and abdominal pain. Pregnancy test was negative. Ultrasound revealed free fluid and a tubo-ovarian abscess. Antibiotic therapy was initiated. Blood cultures grew GAS and the antibiotics then were changed accordingly. She developed STSS and underwent three emergency operations included left salpingo-oophorectomy. Patient was discharged on day 20 and made a full recovery.

Discussion: While PID due to other causes is usually managed medically, GAS requires urgent extensive soft tissue debridement or amputation.

It is now time to consider GAS in gynaecology (as well as in obstetrics) a life threatening condition.

We recommend aggressive surgical approach in cases of GAS to avoid a high risk of mortality and further research into its pathophysiology and management.

PP.082
Group A Streptococcus ovarian abscess in an adolescent virgin
Uttley, J; Gbadamosi, J; Hussain, S; Cuckson, C; Sieunarine, K
Kettering General Hospital, Kettering, United Kingdom

Background: In sexually active women, an ovarian abscess is a recognised complication secondary to severe pelvic inflammatory disease (an ascending female genital tract infection). Secondary ovarian abscesses are also a known complication of certain
gastrointestinal infections, such as diverticulitis and appendicitis. In contrast, primary ovarian abscesses are much rarer, mostly associated with disruption of the ovarian capsule (ovulation or surgical intervention) and can be linked to haematogenous or lymphatic spread. It was therefore quite unusual when a primary ovarian abscess was diagnosed in a young adolescent virginal female with no past surgical history.

Case: A 14-year-old girl presented with a 3 days history of severe intermittent right iliac fossa pain, pyrexia and tachycardia. This began on the background of a 2 weeks history of pharyngitis, vomiting, malaise and weight loss. Biochemistry results gave a septic picture. Differentials at this stage included appendicitis and pyelonephritis; thus antibiotics were commenced. Ultrasound demonstrated a 9 cm complex mass next to the right ovary. The gynaecology team proceeded to an explorative midline laparotomy revealing a primary right ovarian abscess in-situ with the right fallopian tube unaffected. The abscess was drained, excised and sent for analysis. Pathology reported the causative organism to be group A streptococcus. With the diagnosis confirmed and sensitivities known, tailored antibiotics were given to aid in the patient’s complete recovery.

Discussion: Group A Streptococcus is a very rare causative agent in a primary ovarian abscess. However, it is an important differential diagnosis to consider. This organism is more commonly the cause of Strept throat and skin infections (impetigo and cellulitis). It is also responsible for more serious and invasive infections such as Streptococcal toxic shock syndrome and necrotising fasciitis. Aetiology of the abscess is assumed from haematogenous spread of group A Streptococcus pharyngitis.

PP.084
High prevalence of negative histology in large loop excision of the transformation zone (LLETZ)
Bearpark, S; Mulki, O; George, S
Ealing Hospital, London, United Kingdom

Objective: To assess the prevalence of negative histology in large loop excision of the transformation zone (LLETZ) treatment after positive colposcopy and biopsy.

Background: Cervical cancer is the most common cancer in women under the age of 35 in the UK. LLETZ is one of the most common treatment options for cervical intraepithelial neoplasia (CIN), but this procedure may have a significant impact on pregnancy for young women; the main concerns are conditions such as cervical incompetence, premature rupture of membranes and preterm delivery.

Methods: Retrospective analysis of 100 patients who underwent the LLETZ procedure at Ealing Hospital. We looked in particular at the results of the cervical biopsy prior to LLETZ and the subsequent histological findings after LLETZ. The patients’ age and human papilloma virus (HPV) status was also assessed.

Results and conclusions: Of the 100 patients audited, 18% had negative LLETZ histology and half these were patients under 40 years of age. All patients were positive for HPV.

<table>
<thead>
<tr>
<th>Cervical biopsy</th>
<th>Prevalence Negative LLETZ (%)</th>
<th>Negative LLETZ in those aged under 40 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIN1</td>
<td>27</td>
<td>25.9</td>
</tr>
<tr>
<td>CIN1–2</td>
<td>14</td>
<td>28.6</td>
</tr>
<tr>
<td>CIN2</td>
<td>33</td>
<td>15.1</td>
</tr>
<tr>
<td>CIN2–3</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>CIN3</td>
<td>13</td>
<td>7.69</td>
</tr>
<tr>
<td>Negative</td>
<td>3</td>
<td>33.3</td>
</tr>
</tbody>
</table>

These results demonstrate that almost one in five women with positive colposcopy and biopsy had a negative histology at LLETZ. More than 50% of these women were under the age of 40 years; this has important implications for future pregnancies. In view of the high prevalence of negative LLETZ histology, we would recommend repeat colposcopy prior to LLETZ, especially in those...
with CIN1, as it is well documented that this condition can regress spontaneously. This would reduce the number of unnecessary LLETZ procedures and the potential impact on future pregnancies.

**PP.085**

**High-impact, low-cost training in resource-poor settings: an educational symbiosis**

**Gundry, R**

Monze Hospital, Zambia

**Objective:** To establish an obstetric skills/drills program in a Zambian hospital.

**Background:** Obstetric emergency training can improve neonatal outcomes and reduce maternal mortality. Successful training is multidisciplinary, involves the majority of staff and is conducted on-site. Volunteering in Zambia created an educational symbiosis; while I was exposed to rare pathology and high-risk obstetrics, I was able to export the concept of skills/drills.

**Methods:** With local consultant, Michael Breen, I conducted four sessions covering teamwork, directed communication, life-support, pre-eclampsia, postpartum haemorrhage and cord prolapse. Role-played clinical scenarios required clinicians to work within their usual roles and scenarios were run on labour ward, in real time. All team members participated in debriefs.

**Results:** Feedback from attendees was universally positive; this learning method was new to them. Clinical officers showed improved leadership, information exchange increased markedly and staff began to anticipate rather than react to clinical events. We identified important system problems: stocks of inappropriate resuscitation fluids, inaccessibility of emergency drugs, lack of knowledge about dosing regimens and unfamiliarity with location of defibrillators. These were addressed. The course is free and is now run bi-annually by the local consultant.

**Conclusion:** Well-tested UK training methodology is still novel in many developing world healthcare settings. O&G trainees can contribute valuable in a short timeframe while expanding their own experience. Conducting on-site training minimises costs, maximises usefulness and highlights system shortcomings. Involving local clinicians makes training a sustainable long-term option.

**PP.086**

**Hodgkin’s lymphoma in pregnancy**

**Munaza, S; Bapir, M; Wild, S**

University Hospital of North Tees, United Kingdom

**Background:** Hodgkin’s lymphoma is the second most common malignancy in pregnancy occurring in 1:1000–1:6000 pregnancies. Nodular sclerosis is the most common subtype of Hodgkin’s lymphoma in pregnancy. The peak age of Hodgkin’s lymphoma is 20–40 years and therefore corresponds with child bearing age. It is characterised by painless lymphadenopathy especially in the cervical area and is often detected at an early stage. Long term survival rate is 90% without significant comorbidities.

**Case:** We report a case of a 23-year-old, gravida1 referred to antenatal clinic with classical nodular sclerosis Hodgkin’s lymphoma stage 3 diagnosed at 15 weeks of gestation. The plan after discussion in the MDT meeting to have six cycles of ABVD chemotherapy between 20 and 24 weeks of gestation. This was however deferred due to no disease progression on MRI at 18 weeks of gestation. She remained asymptomatic and her prognostic index was relatively low with favourable outcomes. Repeat MRI at 30 weeks showed progression of disease with a modest increase in lymphadenopathy. Therefore a decision made for delivery at 34 weeks and the patient had corticosteroid for fetal lung maturity. The baby was delivered by caesarean section at 34 weeks due to breech presentation, weighing 2.285 g. Postnatally she was reviewed by the oncologist and had her first cycle of chemotherapy.

**Conclusions:** Patients with advanced stage 3 Hodgkin’s Lymphoma diagnosed during the early second trimester of pregnancy may be reviewed by a haematologist at short intervals for signs of disease progression without any treatment. The aim would be to balance the risk of delaying administration of chemotherapy against the risk of disease progression. In our patient as her prognostic index was relatively low, multidisciplinary management led to a more favourable outcome.

**PP.087**

**How does the undergraduate experience in obstetrics and gynaecology influence future career choice?**

**Bullough, S; Culatto, A; Warrander, L; Mullan, C**

Manchester Royal Infirmary and St Mary’s Hospital, Manchester, United Kingdom

**Background:** The 2006 Royal College of Obstetricians & Gynaecologists (RCOG) report on recruitment into obstetrics and gynaecology (O&G) demonstrated a fall during the 1990s. A primary deterrent for applying was a bad undergraduate experience, suggesting improvements are needed in undergraduate O&G placements.

**Methods:** A questionnaire was distributed amongst 4th year medical students at The University of Manchester following their O&G attachment. Quantitative and qualitative questions assessed their experiences.

**Results and conclusions:** Sixty-two students responded to the questionnaires, 29% (n = 18) of whom considered a career in O&G prior to their attachment. Registrars contributed most positively to medical student experience. Labour ward was the most beneficial exposure. 93% (n = 52) said that this undergraduate placement influenced their decision about future career choice, 68% (n = 38) stating this to be positive. Students who had not initially considered O&G stated they felt it was career option following their placement.
Our results suggest the majority of medical students have a positive experience of O&G at undergraduate level, contradicting the 2006 RCOG report. A common theme identified was that the placement encouraged medical students to consider O&G as a career choice, particularly when not previously considered. Further research should be conducted to ascertain whether the Manchester curriculum has something unique contributing to an overall positive experience of the specialty that may have implications for national recruitment. The findings of this study are encouraging, but there is still a gap to bridge between positive medical student experience of O&G and improved recruitment at specialty training level.

PP.088
Implementing a protocol for use of single progesterone level in pregnancy of unknown location: Our experience at Birmingham Women’s Hospital
Woodhead, N; Shehmar, M
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Objective: The aim was to audit local effectiveness of new protocol in managing pregnancy of unknown location (PUL), to determine compliance to the protocol and to measure the commissioning for quality and innovation (CQUIN) performance indicators.

Background: Management of women with PUL represents a considerable clinical burden to early pregnancy units. The CQUIN framework sets target for follow-up and β-hCG measurement. Progesterone measurements can be used to effectively triage and manage women with PUL, reducing follow-up whilst maintaining safety.

Methods: A retrospective case note audit carried out over 6 months from November 2011 to April 2012.

Results and conclusions: Of 236 women had a single serum progesterone measurement. 30% (n = 77) of patients were wrongly assigned to the PUL protocol, leading to unnecessary blood tests and follow up. Mean follow-up was 2 EPAU visits (range 1–9) and 13.2% (n = 21) had >3 β-hCGs on the diagnostic pathway meaning the trust CQUIN performance indicators were met (>10% reduction in follow-up and women having more than 3 β-hCGs). Progesterone level <10 mmol/L indicated discharge without follow-up, only a 17% compliance with protocol (n = 17). The audit highlighted non-uniformity and ambiguity in the reporting of early pregnancy scans. Use of the protocol was clinically safe with no missed ectopic or delays in diagnosis. However challenges were met in extrapolating and implementing a protocol developed in a specialist unit; ongoing audit has helped in educating and building confidence in the new protocol.

PP.089
Interstitial ectopic or angular pregnancy. Can MRI help?
Lee, J; Ward, S; Allen, A
King’s Mill Hospital, Sutton-in-Ashfield, Nottinghamshire, United Kingdom

Background: A cornual ectopic pregnancy is a rare ectopic pregnancy located at the interstitial part of the fallopian tube and lateral to the round ligament. If ruptured, it is associated with a high mortality. It can however be confused with an angular pregnancy which is an intrauterine pregnancy medial to the round ligament.

Case: We report two cases of a cornual ectopic and an angular pregnancy. In the first case, the diagnosis of cornual ectopic took several weeks due to the early gestation and limitation of the ultrasound scan to clearly differentiate if the pregnancy was in the myometrium or endometrium of the cornua of the uterus. Finally, a diagnosis was made on the basis of the gestational sac eccentrically placed in the cornua with <5 mm of myometrium surrounding the gestational sac. The patient was subsequently treated with intramuscular methotrexate. In this case, an earlier diagnosis may have been possible with an MRI.

In the second case, the patient had an IVF conception and was found to have a possible cornual ectopic pregnancy on ultrasound scan. MRI scan was able to determine that it was an angular pregnancy with the gestational sac that was intrauterine and medial to the round ligament. She was managed conservatively. However, she subsequently miscarried. In this case, an MRI prevented an unnecessary treatment with methotrexate.

Conclusion: Ultrasound scan has its limitations in differentiating between a cornual ectopic and an angular pregnancy. If the ultrasound scan findings are inconclusive, an MRI may play a key role in the diagnosis and management these pregnancies.

PP.090
Intestinal obstruction in pregnancy
Ghosh, M; Bhalla, R
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Background: Intestinal obstruction in pregnancy is rare with an incidence 1:1500–1:166431. This is mostly diagnosed in 2nd and 3rd trimester and diagnosis in 1st trimester is about 6%. It can also occur in peripuerium due to electrolyte imbalance. It presents mostly with pain (98%), vomiting (82%), constipation (30%), abdominal tenderness (71%), abnormal peristalsis (55%). Diagnosis is most commonly by X-Ray (positive in 82%). It may be harmful in 1st trimester. USS is safe. CT-needs ionising radiation but MRI needs gadolinium contrast (unknown safety in pregnancy). Causes of intestinal obstruction diagnosed in pregnancy are adhesions (54.6%), intestinal torsion (25%), colorectal ca (3.7%), hernia, appendicitis (more rare).

Case: Of 25-year-old G12,P1+10 with previous caesarean delivery and previous appendectomy presented at 12 weeks of confirmed intrauterine pregnancy with constant and severe generalised pain
abdomen, nausea and vomiting. Observations were stable, abdomen soft and mild tender and abdominal scan showed prominent faces and fluid filled bowel. Routine investigation showed no evidence of infection or electrolyte imbalance. She was treated conservatively with enema and was nil per mouth but till 5th day of treatment had not moved bowels and abdomen was distended. Laparoscopy was done after discussion of risks and benefits of operation in pregnancy by surgeons and gynaecologist. Laparoscopy showed dense adhesion in RIF with a small bowel causing distal small bowel obstruction. She recovered significantly after surgery and was discharged.

Discussion: As intestinal obstruction in pregnancy is rare, high index of clinical suspicion is required, especially if they had previous surgeries. In an obstetric patient without any surgical history, also consider rare surgical causes if has similar presentation like above.

PP.091
Knowledge, skills and attitude of evidence-based medicine among trainees in obstetrics and gynaecology
Jeve, Y
University Hospitals Leicester, Leicester, United Kingdom

Objective: To explore obstetrics and gynaecology trainees’ attitudes, knowledge and skills of evidence-based practice within a teaching hospital setting

Background: Questions are raised in day to day clinical practice but they are not followed and answered evidence-based way.

Methods: Cross-sectional survey using anonymous electronic web based survey tool and questions aimed to examine different components of evidence based medicine. All obstetrics and gynaecology trainees’ working in different teaching hospitals attached to East Midland Workforce Deanery (South) participated. Out of 69 participants 35 responded (51%).

Outcome Measures: Attitude towards evidence-based practice (EBM), use and understanding of different components of EBM in practice, knowledge and skills to use available evidence-based medicine recourses and implementation of skills in clinical practice. Any need for formal training and use of tools in daily practice.

Results and conclusion: Most of the trainees face 1–2 clinical questions per week in their day to day practice and of which they do not know the exact answer. Most trainees (79%) hardly read recent journal articles relevant to their clinical question. Almost 44% of the trainees prefer web search engines (such as Google/Bing) or asking seniors to answer clinical question. There was mixed response to use different components of EBM confidently. Most of the trainees are confident to use basic literature search but not confident in advanced search skills (65% are confident in basic search skills but only 34% are confident in advanced search skills). They do not feel confident enough to appraise literature or make sense of statistic described in paper. Only 20% of trainees had formal training in EBM skills. Hence there is urgent need to make positive efforts to develop formal EBM training as a part of curriculum. It can be very well supported by simple EBM tools to teach, utilise and assess these skills. Hence we recommend use of Educational Prescription – an evidence based medicine tool for teaching and learning medicine. There should be greater emphasis by trainers on dissemination of evidence based medicine in day to day practice.

PP.092
Lichen sclerosis: Are we following the guidelines?
Langley, CD; Javed, A; Chieng, L; Nagy, C; Owen, C
East Lancashire Health Trust (ELHT), United Kingdom

Objective: (i) To compare current diagnosis, management and follow-up in patients with vulval lichen sclerosis (LS) in the gynaecology and dermatology departments at ELHT (ii) To assess whether current BAD and RCOG guidelines are being followed.

Background: Vulval lichen sclerosis can be a distressing and uncomfortable condition that many women feel anxious and hesitant to seek medical advice about. It is, however, easily treatable and can ultimately be managed successfully in the community. Occasional reluctance to prescribe potent topical corticosteroids exists, but this is in fact the current recommended treatment by the BAD and the RCOG. We conducted an audit comparing the diagnosis, management and follow-up of all women with a new diagnosis of LS that were managed either in the out-patient gynaecology clinic or the dedicated vulval clinic run by the dermatology department.

Methods: Data were collected retrospectively on 20 patients with a new diagnosis of vulval LS between August and October 2012.

Results and conclusions: The majority of patients were managed under the gynaecology department; however those patients managed by the dermatology department were more likely to have the correct management and information provision in the form of a leaflet. Various regimens of topical treatments were identified, none of which were in-keeping with the current national recommendations. History taking with enquiry into sexual and urinary function was less than 50%, and discharge of uncomplicated patients back to the community was only 44%. We concluded that synchronisation between the dermatology and gynaecology departments is necessary to streamline the management of LS, and better education of junior staff in particular is required to ensure that the appropriate management and follow-up is being adhered to.

PP.093
Lost and found: The importance of adequate follow-up for lost intrauterine devices
Aref-Adib, M1; Dyer, E2; Kollipara, P1

1Queen’s Hospital, Romford, Essex, United Kingdom; 2Royal Free and University College Hospital Medical School, London, United Kingdom

Objective: To emphasise the potential for uterine perforation following intrauterine device (IUD) insertion. To review the literature on, and discuss appropriate investigation and management of missing IUDs.
PP.094

Management of adult polycystic kidney disease in pregnancy: 10-year outcome from a multidisciplinary team clinic

Pillai, RN; Archana, A; Youssouf, S; Carr, S; Singhal, T

University Hospitals of Leicester NHS Trust, Leicester, United Kingdom

Objective: To evaluate the pregnancy outcome of women with adult polycystic kidney disease (APKD) when it was managed through a multidisciplinary team (MDT) clinic.

Results: Of the 18 pregnancies 13 babies were alive and well, 2 babies were alive but disabled, two miscarriages at 13 and 23 week and one pregnancy was terminated at 28 weeks as the fetus was diagnosed with polycystic kidney disease. Before term, 21% of the deliveries occurred. Two patients experienced hypertensive disorders in current pregnancy. Approximately 40% of women experienced a worsening of blood pressure and renal function in pregnancy. None of the patients developed recurrent UTI's, renal failure or required renal dialysis. A trend towards worsening of renal function was observed with increasing maternal age. Two patients started their pregnancy with creatinine levels above 125 and both of them had a successful pregnancy outcome.

Conclusion: Majority of patients with APKD had successful pregnancy outcome after being managed in a MDT clinic. A mild worsening of the renal disease without any catastrophic events has been observed in patients with APKD after continuing with the pregnancy.

PP.095

Management of chronic pelvic pain

Smitharahvaghan, MV; Kershaw, V; Arutchelvam, S; Roy, S

University Hospitals of North Tees and Hartlepool, United Kingdom

Objective: Assess management of women with chronic pelvic pain. Institute guidelines for management of chronic pelvic pain in women

Background: Chronic pelvic pain is a common gynaecological problem with an estimated prevalence of 38/1000 in women aged 15–73 years. It is the single most common indication for referral to gynaecology clinics, accounting for 20% of outpatient appointments.

Methods: Retrospective analysis of randomly selected case notes of patients referred with chronic pelvic pain over 1 year. The criteria for the audit were taken from RCOG guidelines, Initial management of chronic pelvic pain, and Consensus guidelines for management of chronic pelvic pain from Canada. Analysed using Microsoft Excel.

Results: Of 28 case notes were selected using the electronic documents. Out of this 22 case notes were found to fit the definition of chronic pelvic pain. This showed we need coding for the condition which is very common, to monitor its management. We analysed history taking to evaluate risk factors for chronic pelvic pain, assessing the impact on patient quality of life and the investigations performed. The analysis of results showed both history taking and requesting appropriate investigations needed
improvement. Also all the guidelines recommend trial of medical therapy before surgery, which carries major risk factors. 41% of patients had laparoscopy as first line management. This was not appropriate.

**Conclusion:** Chronic pelvic pain is a symptom with a number of contributory factors rather than a diagnosis. It is important to consider psychological, social and physical causes. Women often present because they seek an explanation for their pain. The assessment process should allow enough time for the woman to be able to tell her story. We are now performing a patient satisfaction survey in the management of chronic pelvic pain. This audit and the guidelines along with the survey will help us manage our patients better.

**PP.096**

**Management of delivery following hemimandibulectomy**

Vanes, NK; Elton, J; Mukherjee, S

University Hospitals of Coventry and Warwickshire, United Kingdom

**Objective:** In this case report, we demonstrate the challenging aspects of managing obstetric patients who have potential airway difficulties and when and how best to manage their delivery.

**Background:** We present a 31-year-old, para 1 Iranian female who presented to the antenatal clinic at 25 weeks of gestation. Her antenatal history included a previous emergency caesarean section with spinal anaesthesia at 39 weeks of gestation in Iran 11 years previously for an unknown reason. Postpartum care had been unremarkable. She had previously undergone hemimandibulectomy with fibula bone graft for an ameloblastoma of the left posterior mandible 3 years previously. Ameloblastoma is benign, rare tumour of the odontogenic epithelium and account for around 1% of all oral tumours. Due to the anatomical distortion tracheal intubation can be difficult.

**Conclusion:** She was seen in the complex anaesthetic clinic at 33 weeks of gestation where she was found to have residual deformity and limited mouth opening. The risks of requiring a general anaesthetic and intubation during an emergency were discussed. After discussion she opted for an elective caesarean section under spinal anaesthetic.

However at 38 weeks of gestation she presented contracting irregularly 2 in 10 min with moderate intensity at midnight. Given the time of day and no evidence of fetal distress a semi-elective caesarean section was planned late evening. After discussion with the on-call consultant anaesthetist and obstetrician discussed the case a decision to proceed with spinal anaesthetic was made. Due to the potential difficulty with intubation a consultant anaesthetist was present. There was a delay in delivery due to the consultant anaesthetist dealing with another trauma case first in main theatres. There was no difficulty in proceeding with spinal anaesthetic and had an uncomplicated caesarean section.

Having a well documented plan for complex obstetric patients can reduce the risks from anaesthetic complications.

**PP.097**

**Management of hyperthyroidism in pregnancy**

Nisal, M; Levy, M; Nisal, K

University Hospitals of Coventry and Warwickshire, United Kingdom

**Objective:** To audit management of hyperthyroidism in pregnancy against the society of endocrinology guidelines.

**Method:** Data were collected from mothers attending combined antenatal-endocrine clinic (once a month) at a tertiary care hospital from 31 July 2005 to 31 December 2010 from hospital notes, maternity system and endocrine database.

**Results:** Out of 173 patients who attended this clinic, 54 had active thyrotoxicosis but 42 patients were included as all records were available for these patients. The mean age of these patients was 29 years and 40% of them had a past history of one miscarriage. Of these patients, 45% had positive anti-TPO antibodies. All patients had serial growth scans and one patient had small for gestational age baby. None of the babies had goiter detected on the scan. 10% of patients had pre-eclampsia and one patient had preterm delivery. Only 11% babies had TFTs measured at birth.

**Conclusion:** There was a high prevalence of miscarriage. PTU was used as a first line drug in our population. Thyroid functions were well controlled and none of the patients remained hyperthyroid by third trimester but the majority of mothers had free T4 in a lower range than recommended. No reported problems with babies in either PTU or CRZ treated mothers.

Hospital guidelines have been revised based on findings of this audit.

**PP.098**

**Management of pregnancy in a woman with lymphedema-distichiasis syndrome**

Patankar, S; Romano, E; Mahmood, T

Tameside Hospital NHS Foundation Trust, Ashton-under-Lyne, United Kingdom

**Background:** Lymphedema-distichiasis (LD) syndrome is characterised by lower limb lymphedema and aberrant eyelashes, typically diagnosed in late childhood. Other common findings are varicose veins, ptosis, congenital heart disease (7%), cleft palate and rarely extradural spinal cysts. FOXC2 gene mutations are known to cause the syndrome. It is inherited in an autosomal dominant manner and about 25% of affected individuals have de novo mutations. The literature is scant regarding the potential problems and their management during pregnancy.

**Case:** A 35-year-old primigravida was diagnosed with LD syndrome as a child following investigations for bilateral lower limb lymphedema. She has two rows of eyelashes. No other member of the family was affected. The anticipated problems regarding this pregnancy were addressed. Low dose aspirin was prescribed for thromboprophylaxis. She was seen by lymphedema nurse regularly and given fitting hosiery to treat the worsening lymphedema. She was advised to report any signs of cellulitis or foot infections. She underwent echocardiogram which was normal.
She was seen by the obstetric anaesthetist. Ultrasound and fetal echocardiography were done to rule out cleft palate and congenital heart anomalies. At 42 weeks of gestation, she was induced and a healthy female child weighing 3580 g was delivered. She was offered referral for genetic testing, which she declined.

**Conclusion:** This case illustrates that pregnancies with relatively uncommon syndromes can be managed appropriately, by understanding the pathology, anticipating potential problems and addressing them with evidence based knowledge and multidisciplinary approach.

**PP.099**

**Management of stillbirths and intrauterine deaths**

**Moore, K; Afridi, G; Goel, A; Saukila, T**

County Durham and Darlington Foundation Trust, United Kingdom

**Objective:** To evaluate the effectiveness of the management of stillbirths and intrauterine deaths within our trust and, furthermore, to quantify the effectiveness of treatment of patients before recent changes in guidelines regarding dosing of misoprostol.

**Background:** Effective management of intrauterine death requires correct diagnosis, sensitive communication, appropriate symptomatic relief, necessary investigations, the creation of memory, timely deliver, comprehensive after care and subsequent follow-up. We evaluated these aspects of care within our trust.

**Method:** A retrospective trust wide audit of University Hospital of North Durham and Darlington Memorial Hospital over eighteen months.

**Results and conclusions:** Thirty three cases were identified within the trust over the 18 month period. In contrast to suggestions made in national guidelines our population group were predominantly neither at the extremes of age or BMI, with the majority being aged 20–24 years (33.3%) and BMI 18.5–24 (39.4%). The majority were non-smokers. None of our patients who received induction of labour required repeat dosing of misoprostol according to the old regimen of treatment. Although in general guidelines were met one case highlighted shortcomings and the importance of streamlined care. Decreased fetal movements accounted for the commonest cause of presentation (33.3%), with placental insufficiency the most common cause of death.

**Table 1**

<table>
<thead>
<tr>
<th>Causes</th>
<th>Percentage of patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antiphospholipid syndrome</td>
<td>23.3</td>
</tr>
<tr>
<td>Thrombophilia</td>
<td>40</td>
</tr>
<tr>
<td>PCOS</td>
<td>16.6</td>
</tr>
<tr>
<td>Thyroid peroxidase antibody/ Hypothyroidism</td>
<td>6.6</td>
</tr>
<tr>
<td>Uterine abnormality</td>
<td>0</td>
</tr>
<tr>
<td>Chromosomal abnormality</td>
<td>0</td>
</tr>
<tr>
<td>Perimenopausal</td>
<td>3.3</td>
</tr>
<tr>
<td>idopathic</td>
<td>36.6</td>
</tr>
</tbody>
</table>

**Conclusions:** The likelihood of recurrent miscarriage increases with increasing maternal age. History of previous live birth does not preclude a women developing recurrent miscarriage. Significant proportion of women who suffered from recurrent miscarriage had PCOS, fibroid uterus, anti phospholipid syndrome, hyper homocysteinemia and thyroid antibodies. No abnormality was found in 36.6% of women.

**PP.101**

**Massive postpartum haemorrhage: outcomes at an ethnically diverse, inner city maternity department**

**Nesbitt, A; Libang, J; Rai, N; Leslie, I; Yoong, W**

North Middlesex University Hospital, London, United Kingdom

**Objective:** To report the maternal characteristics, obstetric factors and maternal and neonatal outcomes of cases of massive postpartum haemorrhage (>2000 mL blood loss).

**Background:** Postpartum haemorrhage (PPH) is a significant source of maternal morbidity and mortality, which is increasing in high-resource countries. Various factors have been implicated in this increase, including changes in maternal characteristics and obstetric practice. We present a case series of massive PPH (>2000 mL blood loss) at an inner city teaching hospital, reviewing maternal characteristics, obstetric practice and maternal and neonatal outcomes.
Method: Cases of women with massive primary PPH between 2007 and 2012 at the North Middlesex Hospital were identified and analysed retrospectively. Of 185 cases identified, notes were available for 139. Subgroup analysis was performed to identify whether blood loss of greater than 3000 mL was associated with specific maternal characteristics or increased adverse outcomes.

Results and conclusions: There was no significant change in the rate of massive PPH at this hospital over the five years of the study. The most common cause of PPH was atonic uterus (48.3%), with traumatic delivery second (21.9%). Mean blood loss was 2856 mL.

There was no significant difference in any maternal characteristic between the groups categorised by blood loss (2000–3000 mL and >3000 mL). Obstetric practice varied only in the increased use of Bakri balloon tamponade in cases of >3000 mL blood loss (P = 0.015). The only significant difference in any outcome was length of stay (P = 0.009).

We therefore conclude that at our institution, neither maternal factors, nor obstetric practice contributed to increased volumes of blood loss in massive PPH. Additionally, mothers who lost more blood, rather predictably, were discharged later.

PP.102
Membership of the Royal College of Obstetricians & Gynaecologists (MRCOG) candidate pass rates: are some deaneries more equal than others?

Cole, JL; Islam, S; Taylor, CJ

City Hospital, Dudley Road, Birmingham, United Kingdom

Objective: To compare MRCOG pass rates to ascertain whether there was significant variance between deaneries.

Background: In the UK junior doctors select in which deanery to pursue specialist training, these bodies are intrinsic in their career progression. We compared MRCOG pass rates to ascertain whether there was significant variance between deaneries. This may prove to be a surrogate marker of deanery training quality and help better inform trainee selection.

Methods: A retrospective analysis of pass list data for MRCOG diets from September 2010 to March 2012. The total number of candidates sitting MRCOG were stratified according to deanery. The primary predictor variable was deanery affiliation and the outcome variables were overall success rate and pass rate at first sitting. Deaneries were ranked based on trainees’ examination performance. Descriptive statistics as well as Chi squared test were used for analysis. Odds ratios for examination success were calculated comparing the highest with the lowest performing deaneries.

Results and conclusions: The number of training deaneries in our study was 16. Data were available for 477 trainees sitting part 1 and 560 sitting part 2 MRCOG. For part 1, the top-ranking deanery was Severn (82%). Candidates affiliated to Severn deanery had a four-fold increased likelihood of passing compared to the lowest ranked deanery (Odds Ratio [OR] 4.1, 95% confidence interval [CI] 1.1–16, P < 0.05). The highest-ranking deanery for part 2 was East-Midlands (82%). Candidates affiliated to East-Midlands deanery had a three-fold increased likelihood of passing when compared to the lowest ranked deanery (OR 3.4, 95% CI 1.5–7.7, P < 0.05)

We found a statistically significant inter-deanery variation with respect to MRCOG examination performance. We believe the data may prove useful to prospective trainees in their deanery selections.

PP.103
Moving O&G trainees to a single version of the curriculum

Prior, M; Adams, T; Baker, A; Scrivener, K; McKenzie, C; Reid, W

Royal College of Obstetricians and Gynaecologists, London, United Kingdom

Background: In 2012 the General Medical Council (GMC) instructed colleges to move all trainees onto the most current versions of their curricula by January 2016, so that all doctors would gain their certificates of completion of training (CCT) against the most modern and therefore safer standards. Major changes were made simultaneously to the O&G core curriculum. Previously trainees demonstrated their curriculum progress using a paper based logbook. The challenges were (a) moving all trainees to an ePortfolio logbook, (b) communicating the changes to trainees and (c) implementation by deaneries.

Methods: A project team was formed at RCOG consisting of senior educational staff, clinical leads and trainees to manage implementation. All previous versions of the core curricula, including the pre-2007 (SpR), were mapped against the 2013 curriculum. The project team worked closely with NHS Education for Scotland (NES) the ePortfolio provider to develop the new ePortfolio logbook. The project was run according to Projects In Controlled Environments (PRINCE2) principles and reported directly to the RCOG Education Board.

Results: Trainees provided essential user input to developing ePortfolio functionality. As members of the project team, and using their networks, three significant additions were made to the development of the new ePortfolio. Firstly, curriculum/logbook ticket requests now allow external assessors to add ratings to trainees’ competencies; secondly ePortfolio users are now able to view previously completed competencies mapped to the 2013 curriculum; and finally trainees also developed a web-based tool to enable them to see changes are relevant to their individual stage of training. NES has tangible improvements to import into other colleges’ eportfolios.

Conclusions: RCOG is the first college to move all its trainees to a single curriculum. By involving stakeholders we have been able to achieve the transition, and further developed our ePortfolio and web-based tools to help communicate the changes. RCOG’s experience will benefit other colleges as they transfer to single curricula.
PP.104
Multidisciplinary management of a large retroperitoneal pelvic mass – leiomyoma
Puppala, SR; Myriokefalitaki, E; Moss, EL
University Hospital of Leicester, United Kingdom

Background: Leiomyomas of the uterus are a common tumor; they can be intrauterine or extrauterine. Extrauterine leiomyoma can be retroperitoneal which are rare neoplasms.

Case: A 56-year-old postmenopausal woman with a BMI 47 and known fibroids presented with postmenopausal bleeding. Hysteroscopy and endometrial biopsy were negative but ultrasound scan showed that the pelvic mass previously diagnosed as fibroid had increased in size with atypical changes. Case was discussed in the MDT and further CT imaging and CT guided biopsy and immunohistochemistry were performed all of which suggested smooth muscle tumour of unknown origin. It was discussed in the MDT again involving the sarcoma team and it was decided that surgery would be necessary to know the true nature of the mass. Patient underwent a J shaped laparotomy for better access to the right side, joint with surgeons and a 20.5 × 22 × 5 cm irregular, soft and lipomatous retroperitoneal mass was removed en block with a total hysterectomy and bilateral salpingo-ophorectomy. Histology revealed a paucicellular myxoid tumour and immunohistochemistry showed diffuse positivity with caldesmon, smooth muscle actin and desmin with low proliferative index. The appearances represented leiomyoma of the pelvic retroperitoneum. The myometrium contained multiple intramural fibroids.

Discussion: Pelvic tumours of unknown origin should be discussed in the multidisciplinary meetings so that the best approach is taken. Adequate preoperative investigations and involvement of relevant teams facilitate an uneventful surgery and recovery. Patient’s counselling and surgical approach is of paramount importance. Retroperitoneal fibroids are rarely diagnosed preoperatively even with ultrasound, CT and MRI. More than 40% of patients affected by this retroperitoneal condition have a concurrent uterine leiomyoma.

PP.105
Myoepithelioma of the uterus: case report
Nicholson, R; Bapir, M; George, M
University Hospital of North Tees, United Kingdom

Background: Myoepithelioma is a soft tissue tumour, classed as a tumour of uncertain differentiation; an intermediate (rarely metastasising) tumour. Common sites for soft tissue tumours include lower limb, intra-abdominal, truncal, head and neck.

Case: We report a case of a 31-year-old, P2⁺¹ presented to the abnormal uterine bleeding clinic with a history of persistent irregular vaginal bleeding, she was anaemic with haemoglobin of 7.0. She had the Mirena coil in situ for contraception and was up to date with her SMEAR, which were normal. Abdominal and pelvic examinations were unremarkable. USS showed a 29 × 30 × 44 mm well circumscribed homogenous mass within the fundus, query nature. MRI suggested that the differentials include cystic degeneration of fibroid or a malignancy such as sarcoma. Hysteroscopy showed a large submucous fibroid filling >50% in the cavity. Endometrial histology showed inactive endometrial glands, the appearances in keeping with the effects of Mirena IUS. Case was discussed in the gynaecology MDT, recommended surgery. Patient opted for a hysterectomy and had LAVH. Initial histology confirmed an unusual neoplasm query leiomyoma. Further morphology and immunohistochemistry staining by supplementary histologists felt the neoplasm represented a myoepithelioma. Subsequent gene rearrangements with EWSR1 were negative but concluded the histology is best regarded as a myoepithelioma.

Conclusion: Myoepithelioma is a rare condition and exhibit a benign behaviour. Myoepithelioma can be seen at many sites within the body, within the genital tract is rare, and not previously seen within the uterus. Histological diagnosis is challenging and characteristic gene rearrangement (EWSR1) has been demonstrated in some soft tissue myoepithelioma.

PP.106
Neonatal outcome in pregnant diabetic women
Emovon, E; Pinto, A
Small district general hospital with level two neonatal facilities

Objective: To determine the outcome of babies born to pregnant diabetic women.

Background: In the present climate, centralisation of medical service is a recurring theme and as a result, many neonatal units in district hospitals offer level 1 or 2 care with limited neonatal cots. Based on the above neonatologists are particular about when, a high risk patient is induced depending on the availability of neonatal cots. Diabetic pregnant women are regarded as high risk and were faced with a situation where, induction of labour of pregnant diabetic women had to be delayed till a cot was available irrespective of type of diabetes and gestation of the fetus.

Methods: We carried out a retrospective review of the outcome of all babies born to diabetic mothers over a 6 month period. We obtained our data from the labour ward delivery book as well as ‘badgernet’ our local hospital computer database. Analysis was carried out using Microsoft Excel.

Results: Majority of babies (85%; n = 21) born to gestational diabetics mothers were not admitted. 100% of babies born to diet controlled gestational diabetics did not require neonatal admission. The gestational diabetics on metformin who were admitted did not require intensive care. Majority of the babies of pre existing diabetic patients, who required neonatal admission were born preterm 85.8% n = 7.

Conclusion: Based on our small numbers, there is a trend suggesting that, a baby of a diet controlled gestational diabetic, born vaginally at term, is unlikely to require SCBU admission. Therefore induction of labour should not be delayed in such cohort even in small hospitals thereby creating a backlog of patients requiring delivery.
Obesity in pregnancy: An audit of compliance with guidelines

Malik, S; Austin-Smith, K; Cuckson, C; Sieunarine, K
Kettering General Hospital, United Kingdom

Objective: To ascertain our compliance with local and national guidelines on obesity in pregnancy and to establish our adherence to maternity CNST criteria.

Background: Maternal obesity is an increasing problem and is a significant cause of morbidity and mortality. According to the Office for National Statistics report (2013) the proportion of women that were overweight (including obese) increased from 49% to 58% between 1993 and 2011. This poses significant problems for obstetric care.

Methods: A retrospective case note review was performed of all deliveries between 1 March 2012 and 30 April 2012. Patients were identified from a prospectively maintained register. Inclusion criteria was booking body mass index (BMI) of 30 or greater (n = 124). Patients were sub-divided into 3 classes based on their BMI: Class 1 (BMI 30–34.9), Class 2 (BMI 35–39.9), and Class 3 (BMI 40 or over).

Results: A total of 626 deliveries were identified during this 2-month period. Out of these 124 cases (20% of deliveries) met the inclusion criterion. Of these 66% was Class 1, 24% were Class 2 and 10% were Class 3 (morbidly obese). Majority were multiparous (66%) and only 1% were grand multiparous. In all BMI classes our compliance with guidelines and CNST criteria was below target. Areas where we performed significantly poorly were: recoding of BMI in 3rd trimester (43.4%); documentation of antenatal discussion of intra-partum complications related to BMI (9.8%); prescription of aspirin (39%), high dose folic acid (15%), and vitamin D (34%); and documentation in 3rd trimester was below target. Areas where we performed significantly poorly were: recoding of BMI in 3rd trimester (43.4%); documentation of antenatal discussion of intra-partum complications related to BMI (9.8%); prescription of aspirin (39%), high dose folic acid (15%), and vitamin D (34%); and documentation in 3rd trimester was below target.

Conclusion: This audit has identified significant deficiencies in our compliance with local and national guidelines. Recommendations made include development of an information leaflet for obese patients, appointment of a lead midwife for obesity and re-audit to review the changes implemented to our practice.

Obstetric fistula: an experience from 2 weeks at Kitovu Hospital, Uganda

MacLaren, EJ; Duffy, S
Chelsea and Westminster Hospital, London, United Kingdom

Objective: To undertake a 2-week fistula training camp in Uganda as part of a USAID/Engender Health International programme.

Background: The catastrophic physical and psychological effects of Obstetric fistula worldwide are tragically hidden from the world’s media. This childbirth injury is sadly common in low and middle income countries with an annual prevalence of 50–130 000 new cases per year. Obstetric fistula is associated with an increase in maternal mortality and a 95% perinatal mortality. Fistula leaves women with a debilitating connection commonly between the bladder and the vagina or the rectum and the vagina. The constant drainage of urine/faeces per vaginum leads to extensive scarring, infection and social isolation (The obstructed labour complex).

Methods: Prior to arrival at Kitovu Hospital, Masaka, Uganda, local radio had been used to advertise the training camp to allow women to attend from all over the country. Ninety cases were assessed for operations and 67 operations were performed. Three Ugandan Doctors continued their training in the assessment, operating and postoperative management of Obstetric Fistula. Of these cases 26 were vesico-vaginal Fistula (VVF) repairs, 21 recto-vaginal fistula (RVF) repairs including secondary anal sphincter repairs and a variety of other operations including a Mainz Pouch.

Results and conclusions: This experience of obstetric fistula has shown how destructive birth can be both physically and psychologically. Since 2003 only 12 000 women in 45 countries across Africa, Asia and the Middle-East have received treatment for obstetric fistula. There is a growing divide between cases created and cured and international focus is desperately needed to help the estimated 3.5 million women who already have a fistula. In addition to this more preventative measures need to be put in place to as a matter of urgency.

Obstructive sleep apnoea in pregnancy

Biswas, B1; Rajeswari, J1; Davison, J2; Molyneux, AW1

1 King’s Mill Hospital, Sherwood Forest Hospitals NHS Foundation Trust, Sutton in Ashfield, United Kingdom; 2 Royal Derby Hospital, Derby, United Kingdom

Background: Obstructive sleep apnoea (OSA) refers to apnoea during sleep despite respiratory effort. Various maternal and fetal complications have been described to be associated with OSA. However large population studies are unavailable to pinpoint exact incidence, causative factors and associated complications. We describe a patient with OSA that we recently managed and attempt to streamline management principles.

Case: Of 32-year-old primigravida, BMI 44, known to have OSA on CPAP at night. Antenatal care done jointly with the Respiratory team. GTT at 28 weeks was normal. She had serial growth scans from 28 weeks. At 36 weeks growth tailed off, monitored and induced at term, had a caesarean section for failure to progress at 4 cm. Discharged on day 3 but readmitted with wound infection on day 7. Joint management with tissue viability team resulted in satisfactory wound healing with secondary intent.
Table 1

<table>
<thead>
<tr>
<th>Management of sleep apnoea in pregnancy</th>
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</thead>
<tbody>
<tr>
<td><strong>Conservative interventions</strong></td>
</tr>
<tr>
<td>Reducing BMI and BP during pre-conceptual care.</td>
</tr>
<tr>
<td>Reducing weight gain during pregnancy, dietician referral</td>
</tr>
<tr>
<td>Avoid supine sleeping position</td>
</tr>
<tr>
<td>Avoid evening sedation</td>
</tr>
<tr>
<td><strong>Medical/surgical interventions</strong></td>
</tr>
<tr>
<td>CPAP</td>
</tr>
<tr>
<td>Supplemental O₂ UPPP/tracheostomy in extreme cases</td>
</tr>
<tr>
<td>Early recognition of symptoms especially if BMI or hypertension</td>
</tr>
<tr>
<td>Early referral to Respiratory Consultant for PSG</td>
</tr>
<tr>
<td>MDT care, Anesthetic referral</td>
</tr>
<tr>
<td>BP and proteinuria monitoring - suggest 2 weekly visits from 28 weeks</td>
</tr>
<tr>
<td>Serial growth scans</td>
</tr>
<tr>
<td>CTGs/IOL as needed if O₂ dependent or signs of fetal compromise</td>
</tr>
<tr>
<td>Aim to deliver vaginally</td>
</tr>
<tr>
<td>Post natal follow up by GP</td>
</tr>
<tr>
<td><strong>Medical/surgical interventions</strong></td>
</tr>
<tr>
<td>CPAP</td>
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<tr>
<td>Supplemental O₂ UPPP/tracheostomy in extreme cases</td>
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<td>Serial growth scans</td>
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<td>CTGs/IOL as needed if O₂ dependent or signs of fetal compromise</td>
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<tr>
<td>Aim to deliver vaginally</td>
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<td>Post natal follow up by GP</td>
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**Discussion:** During pregnancy physical and hormonal alterations affect normal sleep and the respiratory system predisposing women to the development or worsening of pre-existing OSA syndrome. The exact incidence/prevalence of OSA in pregnancy remains uncertain. Polysomnography (PSG) is the gold standard for diagnosis. Obesity, pregnancy weight gain and increase in neck circumference are risk factors for OSA with the latter independent from body weight being used to predict OSA. Symptoms of OSA include daytime sleepiness, waking unrefreshed, memory/concentration lapses and personality changes. Maternal complications include pre-eclampsia, pulmonary hypertension, gestational diabetes and preterm birth while fetal complications include induced reductions, growth restriction, low Apgar’s and heart rate abnormalities. Questioning at first visit and monitoring for symptoms of snoring might detect early OSA. Pregnant women who are obese or develop hypertension might warrant evaluation for OSA. Management should involve a multidisciplinary team with primary care providers, specialist nurses, obstetricians, anaesthetists and respiratory physicians. In the presence of significant OSA or related nocturnal hypoxemia, nasal CPAP is the therapy of choice.

**Background:** ‘The RCOG recommends that obstetricians achieve experience in spontaneous vaginal delivery prior to commencing training in operative vaginal delivery. The goal of operative vaginal delivery is to mimic spontaneous vaginal birth, thereby expediting delivery with a minimum of maternal or neonatal morbidity.’ CNST requires regular audit of to ensure compliance to national guidelines.

**Methods:** There were 148 cases of operative vaginal delivery recorded on Evolution between 1 January 2013 and 31st March 2013. A sample of 40 notes were requested, however only 30 notes had complete patient records. Therefore overall 20% were sampled. Data analysis was performed with Microsoft Excel.

**Results and conclusions:**

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<tr>
<td>Bladder care recorded</td>
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<tr>
<td>Patient debriefed</td>
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<tr>
<td>Assessment as per guideline</td>
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Overall this audit shows we are complying with RCOG guidelines for operative vaginal delivery. An area for improvement is ensuring women are debriefed after the procedure and documented.

**PP.110**

**Operative vaginal delivery audit at University Hospitals of Coventry and Warwickshire**

**Smith, E; Vanes, NK; Lacey, L; Goswami, K**

University Hospitals of Coventry and Warwickshire, United Kingdom

**Objective:** To determine if we adhering to the RCOG guidelines for operative vaginal delivery and if we compliant with CNST standards.

**Background:** ‘The RCOG recommends that obstetricians achieve experience in spontaneous vaginal delivery prior to commencing training in operative vaginal delivery. The goal of operative vaginal delivery is to mimic spontaneous vaginal birth, thereby expediting delivery with a minimum of maternal or neonatal morbidity.’ CNST requires regular audit of to ensure compliance to national guidelines.

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Overall this audit shows we are complying with RCOG guidelines for operative vaginal delivery. An area for improvement is ensuring women are debriefed after the procedure and documented.

**PP.111**

**Operative vaginal delivery prospective audit for March 2013**

**Steshenko, O; Ofili-Yebovi, D**

King’s College Hospital, London, United Kingdom

**Objective:** To assess current practice of operative vaginal deliveries in maternity unit of King’s College Hospital (KCH) comparing it against the standards which are set in local guidelines.

**Background:** The operative vaginal delivery (OVD) rate in the UK is around 10–13%. Although OVD carries potential risk of morbidity for both the woman and the newborn, it could be a safer option comparing to caesarean section if the OVD is performed by an operator with the knowledge, skills and experience requiring to use this method and manage effectively complications that may occur.

**Methods:** Medical case records of all women who had operative instrumental deliveries in the maternity department in March 2013 were identified prospectively and analysed accordingly. The audit pro forma has been developed using Microsoft Excel software.

**Results and conclusions:** Standards set in local guideline were met (≥75%) for obtaining informed consent, using effective analgesia, appropriate person performing procedure and supervision,
performing abdominal palpation with vaginal examination, bladder care prior and post procedure, completing pro forma, prescribing analgesia. Standards were not met for obtaining cord arterial and venous samples (50%), presence of a neonatologist (65%) and completing operative vaginal delivery pro forma in cases of failed instrumental deliveries (0%). The following recommendations were made: the EPR pro forma should include place of delivery; all members of obstetric team should be advised to complete the pro forma for all instrumental deliveries including failed ones; it is important to improve record of attempts to obtain cord arterial and venous blood sample; the OVD pro forma should include record on the presence of a neonatologist.

**PP.112**

**Outcome after amniocentesis for prenatal diagnosis with a single operator**

Ramroop, N; Unipan, A; Yadava, R; Thakur, V

Mid-Essex Hospital Trust, United Kingdom

**Objective:** Amniocentesis is the most common invasive prenatal diagnostic procedure undertaken. The RCOG guideline regarding amniocentesis suggests possible complication rates considering risks involved with the procedure. This audit was designed to compare these complication rates in a DGH with the RCOG guideline.

**Background:** Up to 5% of women will be offered an invasive procedure such as amniocentesis or CVS during their pregnancy. The main aim of amniocentesis is to obtain amniotic fluid for karyotyping from 15 weeks onwards. Risks associated with the procedure include miscarriage, sepsis, fetal and maternal trauma.

**Methods:** This audit was retrospective, with data collected over the 2 year period 2011–12. Forty-four case notes were investigated against seven parameters:

1. Amniocentesis indication
2. Gestational age
3. Number of attempts
4. Transplacental approach
5. Liquor colour
6. Result of amniocentesis
7. Outcome of pregnancy

**Results and conclusions:** At least two sets of notes were excluded from analysis due to inadequate information. In all adequately documented cases, amniocentesis was performed after 15 weeks of gestation. Second attempts were required in 5% of cases. Transplacental approaches were used in 4.5% of cases. Clear liquor was obtained in the majority of cases. Normal karyotyping results were found in 88.1% cases; these pregnancies delivered at full term. Anomalies were confirmed in 11.9% of cases, with TOP usually opted for. The miscarriage rate was 2% overall. The department exceeded the standards set in the RCOG guideline; most likely due to all procedures being conducted by a single skilled operator.

It was observed throughout this audit that complete documentation of information was often lacking. This results in less accountability and transparency. As few perinatal investigations are offered to women, accurate documentation is essential to ensure continuity of care.

**PP.113**

**Ovarian cancer in pregnancy: diagnostic and therapeutic dilemma**

**Raut, J; Pettipiece, L; Allsop, J; Phillips, A**

Centre for Gynaecological Cancers and Laparoscopic Surgery, Royal Derby Hospital, Derby.

**Objective:** To review the evidences available for management of ovarian cancer in pregnancy.

**Background:** Ovarian cancer in pregnancy is rare. Dysgerminoma is tumour of young age, can present in pregnancy. In our case report we misdiagnosed a dysgerminoma in pregnancy, became only evident after caesarean section.

**Methods:** We searched Cochrane Library, UpToDate, MEDLINE, EMBASE, PubMed, TRIP, reviewed 68 articles. The evidence is of low quality as majority are retrospective studies and case reports.

**Results and conclusions:** A 22-year-old, fit and well para 1 was booked at our hospital. Her dating scan found a complex left adnexal mass (108 × 84 × 60 mm). MRI confirmed it as broad ligament fibroid. CA125 was 22. Antenatally she had recurrent abdominal pain, managed conservatively. As vaginal delivery deemed impossible she had a planned LSCS at 38/40 of a healthy infant. A 10 cm solid left ovarian mass was identified and left-salpingoophrectomy was performed. Histology confirmed dysgerminoma. It was discussed at Germ cell MDT - no further treatment recommended. She has now been followed-up for 2 years, without any evidence of recurrence.

Glanc (2008): ‘goal of ultrasound is to identify those patients in whom conservative management is appropriate’. MRI is generally the next best imaging modality. Regarding follow-up, UpToDate says, ‘outcomes from surveillance for completely resected stage 1A disease are excellent. Although 15–25% will recur’. Michener (2013) states that; ‘Ovarian dysgerminomas tend to recur most often in the first 1–3 years after treatment’. UpToDate says: ‘no tumour markers reliably serve as indicators of disease recurrence, except lactate-dehydrogenase’. There are no prospective trials testing the utility of radiographic surveillance. Society of Gynaecological Oncology does not recommend routine radiographic surveillance. Michener advocates ‘leaving the opposite ovary undisturbed if it is of normal size and appearance...dysgerminomas are highly responsive to both radiation and platinum-based chemotherapy’.

**PP.114**

**Patient selection for cold coagulation: an audit**

**Aref-Adib, M; Rains, J; Adib, T; Bano, F**

Department of Obstetrics and Gynaecology, Queen’s Hospital, Romford, Essex, United Kingdom

**Objective:** An audit to compare the selection of patients for cold coagulation (CC) against NHSCSP guidelines for treatment of CIN.
Background: The overtreatment of women aged under 25 years with high grade CIN presents a dilemma for clinicians as it is well known that over half of these cases will regress or will still be of a treatable precancerous stage at the age 25 years when they can join a screening program. Excisional treatment (e.g. LLETZ) is associated with an increased risk of obstetric complications. CC (100°C for 120 s) is an alternative, ablative therapy with fewer risks and no evidence of inferiority to LLETZ. However, the NHSCSP states that ablative techniques are only suitable in certain selected cases.

Methods: A retrospective audit of all women treated for CIN1 or above with CC. Data from January 2010 to October 2011 was gathered from treatment diary, clinical failsafe books, Cyberlab and CIMS database for colposcopy. Women treated for symptomatic ectropion (SE) were excluded.

Results: 95 women were treated with CC over the period, with 60 cases of SE excluded. Of the 35 women treated with CC for CIN1 or above, 21 were <24 years old. The table below sets out the proportion of cases in which NHSCSP standards were met.

<table>
<thead>
<tr>
<th>NHSCSP audit standard</th>
<th>Compliance (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entire transformation zone is visualised</td>
<td>100</td>
</tr>
<tr>
<td>No evidence of glandular abnormality</td>
<td>100</td>
</tr>
<tr>
<td>No evidence of invasive disease</td>
<td>100</td>
</tr>
<tr>
<td>No major discrepancy between cytology and histology</td>
<td>94</td>
</tr>
</tbody>
</table>

Conclusions: Women undergoing CC for CIN, the majority under 25 years of age, are appropriately managed according to NHSCSP standards. Less destructive treatment methods may be preferable in younger, nulliparous women, although longer term data are needed.

PP.115
Pelvic inflammatory disease following hysteroscopy – a multidisciplinary approach
Sadruddin, F; Vanes, NK; Birchnell, K; Mukherjee, S
University Hospital’s of Coventry and Warwickshire

Objective: In this case report, we demonstrate the challenging aspects of septic patients and how a multidisciplinary approach can improve clinical outcomes.

Case: We present a 28-year-old, para 0 women who was admitted with a 5 day history of pyrexia, left sided abdominal pain, vomiting and diarrhoea. She had a hysteroscopy and endometrial biopsy 10 days previously. Past medical history included pelvic inflammatory disease, endometriosis, osteoporosis and type 1 diabetes mellitus. A previous laparotomy for bilateral ovarian cysts had been performed.

On examination she was pyrexial, HR 113 bpm, BP 130/63, O2 sat 98% on air, BM 13. Abdomen was slightly distended and tender on palpation in the left iliac fossa. Bloods tests revealed WCC 21.9, CRP 580. The impression was diabetic ketoacidosis with sepsis secondary to a pelvic abscess. Broad spectrum IV antibiotics were started, and CT abdomen and pelvis demonstrated bilateral ovarian cysts, left cyst with nodules, fluid collection around the hepatic flexure and oedematous large bowel throughout. The patient underwent ultrasound-guided transvaginal tubo-ovarian abscess drainage. After 24 hours the patient was doing well, but 48 hours later she deteriorated. This raised suspicion of bowel perforation from the procedure. Urgent CT showed no free gas in the abdomen but worsening appearance of cystic anomaly in pelvis and leaking free fluid. Laparotomy was advised against and microbiology was consulted changing her antibiotic treatment. 6 days post-procedure she had clinically improved with blood results WBC 10.4, CRP 50.

Conclusion: This case demonstrates the importance of a multidisciplinary approach, with medical, surgical, gynaecological, radiology and microbiology teams working together to optimise quality of care. A high level of suspicion for bowel perforation should be raised with regards to deterioration post-drainage procedure in a clinically unwell patient.

PP.116
Peripartum hysterectomies at a district general hospital: a 12-year retrospective review
Ram, R; Matts, S
George Eliot Hospital, Nuneaton, United Kingdom

Objective: To analyse maternal and neonatal morbidity, mortality in women undergoing peripartum hysterectomy and compare against national data.

Background: Postpartum haemorrhage (PPH) is one of the leading causes of maternal mortality. Less than 1% of women who had hysterectomy died according to 2005–2006 UKOSS data. It is a lifesaving procedure if performed in a timely manner.

Methods: Retrospective review of case notes/electronic records of all cases of peripartum hysterectomies at the George Eliot hospital between 1 January 2000 and 31 December 2012.

Results: Fourteen notes were available for data collection. Average age of women = 34.07 range = 27–40. Of the 14, 12 (85.71%) were para 1–3, one para 4 and one woman underwent hysterectomy following her first pregnancy. Average BMI was 27.85 (range: 21–39). Of the 14, four (28.57%) were women with previous caesarean section (CS).

Mode of delivery was CS in 12/14 (85.71%); elective CS = 4 and emergency CS = 8, assisted delivery = 1(7.14%) and spontaneous vaginal delivery (SVD) = 1 (7.14%).

Cause of PPH was uterine atony in 5/14 (35.7%), genital tract trauma (including cervical tear, extension of angle at CS etc) in 3/14(21.4%), rupture uterus, morbidly adherent placenta (MAP) and placenta previa in 2 each.

Average total estimated blood loss (EBL) = 4.28 L (range: 2–6.5 L). No. of women who developed DIC = 6/12 (50%). No,
of women transferred to ITU = 7/14 (50%). Average no. of days of ITU stay = 3.4 days. No maternal death occurred. Average no. of units of blood transfused = 8. Complications were visceral injury = 2/12 (16.66%), return to theatre = 3/12 (25%), infection = 4/12 (33.33%).

Live births occurred in 13/14 (92.85%). SCBU admissions = 2/12 (16.66%).

**Conclusion:** The most common cause of PPH was uterine atony; ITU admission rate lower compared to UKOSS data; lower complication rates compared to national data.

**PP.117**

**Persistent genital arousal disorder: A review of the current literature**

Mitra, A; Chandrasekaran, D; Shukla, A

Department of Obstetrics and Gynaecology, Northampton General Hospital, Northampton, United Kingdom

**Objective:** Our goal was to carry out a systematic review of the literature, in order to improve our understanding of the aetiology and current recommendations for management of persistent genital arousal disorder (PGAD).

**Background:** PGAD is a poorly understood condition that may exist in up to 1% of the female population. There exist a handful of reports in the sexual health journals, but not in the gynaecology literature. However, this condition can be encountered in general gynaecology clinics, and effective management of these patients is often challenging.

**Methods:** We searched Medline, Embase and Google Scholar using the search terms ‘persistent genital arousal disorder’, ‘restless genital syndrome’ and ‘persistent sexual arousal syndrome’. We restricted the search to English language. We found 33 articles.

**Results and conclusions:** This review identifies the diverse aetiologies, which include pharmacological, neurological, vascular and psychological. There is also an association with overactive bladder and restless leg syndromes. However, a high proportion of cases are idiopathic in nature. Investigation and treatment should be influenced by history and examination, which should also include genital tactile mapping (GTM). MRI pelvis is the imaging modality of choice in cases where there is a suspicion of nerve entrapment or vascular congestion.

There is no robust evidence to advocate one particular medical or surgical intervention, due to numerous causative factors. Psychological intervention appears to have the most positive impact on quality of life in this patient group. Electroconvulsive therapy has been shown to be effective in a handful of cases where PGAD is associated with psychiatric disorders. Transcutaneous electric nerve stimulators (TENS) and benzodiazepines have been used with limited efficacy. There is currently no evidence to support a role for surgical management.

**PP.118**

**Pituitary adenoma in pregnancy**

Bhatt, T; Venkitaraman, U

Leicester General Hospital, University Hospitals of Leicester, Leicester, United Kingdom

**Case:** A woman of 31 years presented at 31+6 weeks of gestation with decreased visual acuity in the left eye. Her blood pressure was normal with no proteinuria. Her last pregnancy was complicated by mild vision loss, pre-eclampsia, induction of labour at 38+5 weeks and forceps delivery. Initial diagnosis was atypical optic neuritis.

By 35+5 weeks, her left temporal visual field defect was large with bilateral optic disc swelling. A sellar/suprasellar mass in the pituitary gland, compressing the optic chiasm was seen on magnetic resonance imaging (MRI). Serum prolactin and insulin-like growth factor (IGF1) were raised. The patient was commenced on Cabergoline.

Labour was induced at 36+5 weeks, due to deteriorating vision. With epidural anaesthesia, the patient achieved vaginal delivery. Maternal blood pressure remained normal.

At six weeks postpartum, vision and hormone levels returned to normal. The pituitary macroadenoma is stable however persists 6 months later and transphenoidal resection is scheduled.

**Discussion:** Intracranial tumours occur in 3.6/106 of the population of which pituitary adenomas constitute 10%. 5–15% of pituitary tumours enlarge in pregnancy due to vascular engorgement in the hypervolaemic state of pregnancy, and estrogen-mediated physiological hyperplasia of the pituitary gland. Presentation includes symptoms of raised ICP, focal neurological deficits due to local mass effect of tumour, and effects of pituitary overactivity/insufficiency. Vision loss due to pressure on the optic chiasm/nerves is common. Diagnosis of more prevalent pregnancy-related conditions (e.g. hyperemesis gravidarum; pre-eclampsia) may lead to delayed diagnosis.

Management should be expectant or medical during pregnancy. Cabergoline, a dopamine agonist, reduces tumour size by acting on pituitary lactotrophs. Surgical tumour resection whilst pregnancy can be successful but should be reserved for severely progressive neurological deficit. Safety to labour/deliver vaginally must be evaluated in advance if ICP is raised, and caesarean section considered. Multidisciplinary obstetric, neurosurgical and anaesthetic effort is essential.

**PP.119**

**Postpartum haemorrhage in high risk population**

Abdul Raheem, T; Dsa; Momin; Al-debbagh; Parveen

Royal Gwent Hospital, United Kingdom

**Objective:** An increase in the incidence of major postpartum haemorrhage (PPH) was noticed in our unit, so we carried out an evaluation of management of major PPH and an observational study to look at presence of risk and other associated factors.
**Background:** No agreed national figures were found as there is no universal method of calculating estimated blood loss (EBL) and the variation in the definitions of major PPH.

**Methods:** Prospective audit for 3 months, between 1 September and 30 November 2012. Drop in Hb was used to confirm EBL. Results were compared with audit on management of massive PPH in Heatherwood and Wexham Park Hospital NHS Trust (presented at the 9th RCOG scientific meeting of RCOG 2011) and Scottish Confidential Audit for severe maternal morbidity.

**Results:**
- Total deliveries: 1057
- Incidence of major PPH (≥1500 mL): 3.4%
- Incidence of major severe PPH (>2L): 0.85%
- 94% delivered in hospital.
- Causes: 50% atony, 14% retained placenta, 11% placenta praevia/accreta, 11% uterine angle extensions, 8% vaginal tears, 6% adhesions.
- Consultants present in 61%, informed in 36%
- 50% occurred out of hours.
- 47% emergency CS, 36% SVD, 11% instrumental.
- 100% had at least one risk factor. 63% had multiple risks.
- 61% did not need blood transfusion. 3% needed massive blood transfusion.
- Cell saver used in all cases of Jehovah’s Witness and placenta praevia.
- Major PPH protocol was activates in all cases.
- Compliance with guidelines: 95%.

**Conclusion:** The increase in major PPH is mainly because of the increased risk factors in the sample. The majority were managed in compliance with the local protocol. Pre-designed pro forma can be used to improve documentation. Standard method of estimating blood loss should be followed and documented. Cell saver should be used in all emergencies. Radiologist should be involved as early as possible when accreta is suspected.

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**PP.120**

**Pregnancy and the biologic omalizumab for the treatment of asthma: A case report**

Quarshie, B; MacDougall, M; Patience, A

Royal Victorian Infirmary, Newcastle upon Tyne, United Kingdom

**Background:** Asthma remains a common cause of indirect maternal death with about 5 deaths each triennium in the last four trienniums. Omalizumab is a recombinant DNA derived monoclonal antibody that binds to IgE. It is a major advance in the treatment of severe persistent allergic asthma which is poorly controlled despite treatment with corticosteroids and long acting β agonist, however its use in pregnancy is fairly poorly documented.

**Case:** A 39-year-old caucasian female taking omalizumab to treat her severe asthma was referred to the obstetricians with an unplanned pregnancy at 12 weeks of gestation. Outside of pregnancy, when on conventional therapy and not on a biologic, she was frequently admitted to ITU for her asthma. Omalizumab represented a significant improvement in her asthma care. She was counselled about the risks, both immediate, in terms of her asthma control and of teratogenicity, and in the longer term, with regard to potential immunosuppression of the neonate. Counselling was tailored on the information obtained from the UK Teratology Information Service. Following a period of improvement in her asthma control the patient decided under the supervision of her respiratory physician and obstetrician to discontinue her omalizumab at 19 weeks of gestation. She had a normal fetal anomaly scan at 20 weeks of gestation.

**Discussion:** The decision about continuing or discontinuing her Omalizumab depended upon the balance between the risk of discontinuing and potentially destabilising her poorly controlled asthma versus the risk of starting a drug that has only been reported in 144 cases in the literature to date. While the teratogenetic risk appear to be low continuing the drug in the third trimester might immuno-compromise the neonate making avoidance of live vaccines desirable.

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**PP.121**

**Pregnancy following endometrial ablation**

Shajpal, A

Leicester Royal Infirmary, Leicester, United Kingdom

**Case:** This 39-year-old patient, para 2, underwent endometrial ablation at the age of 32 years due to a history of menorrhagia. Prior to the procedure she was advised of the risks associated with pregnancy following endometrial ablation. Seven years later she found herself to be pregnant and decided to continue with the pregnancy.

Her 20 weeks scan showed a posterior low placenta and delivery was discussed at this time, along with the risk of placenta accreta. This patient was closely monitored throughout her pregnancy. A scan at 34 weeks revealed normal growth and liquor volume. The placenta was anterior high. The risk of placenta accreta was rediscussed – both with the patient and in a multidisciplinary meeting.

The patient opted for an elective caesarean, which was successfully performed at 37+3 weeks of gestation, including tubal ligation and uterine artery embolisation.

**Background:** Endometrial ablation is a common gynaecological procedure. It is important that patients are appropriately counselled prior to the procedure, as pregnancy is contraindicated following endometrial ablation. Pregnancies following endometrial ablation are associated with increased fetal and maternal complications, including: miscarriage, prematurity, preterm premature rupture of membranes, abnormal placenta, uterine rupture, caesarean delivery, and emergency hysterectomy.

**Discussion:** There are other cases of successful pregnancies in the literature. However there are also cases which demonstrate some of the serious potential complications. There is no set guidance on management of these pregnancies. However, on review of available literature it seems appropriate for these patients to be followed-up antenatally with serial ultrasound scans to assess fetal growth. Delivery should be planned in a unit where blood products are available and staff whom are experienced in managing caesarean hysterectomies.
This case highlights the importance of counselling patients regarding pregnancy prior to embolisation.

PP.122
Pregnancy following endometrial ablation, complicated by unusual placentation and failed medical termination of pregnancy
Medland, V; Grant, S
Southmead Hospital, North Bristol NHS Trust, United Kingdom

Background: Endometrial ablation is a common method of treating menorrhagia, but is not reliable contraception. Post-ablation pregnancy rates of around 0.7% are reported. Case reports highlight pregnancy complications including morbidity adherent placenta, and surgical terminations complicated by cervical stenosis and intrauterine adhesions. 38% choose to end these pregnancies, and reports of uneventful medical terminations exist, although one case was complicated by cervical stenosis.

Case: A 33-year-old woman had had one normal delivery in the past. She subsequently underwent Novasure endometrial ablation in 2011.

She then became pregnant, and early ultrasound scan was normal, however, at 12+4 weeks there was oligohydramnios and an enlarged, abnormal-looking placenta. Invasive testing was discussed but was impossible due to placental location and near-anhydramnios. The patient opted for medical termination. At 14+3 the patient had 200 mg mifepristone followed by misoprostol 400 mcg, 3-hourly, over twelve hours with no discernible cervical change or uterine contractions. This was then repeated without effect. Gemeprost, 1 mg, 3-h for twelve hours was tried with no result. Consequently, a Foley catheter was inflated in the cervix, and misoprostol regimen repeated, but produced no ripening or contractions. A Syntocinon infusion over 4 hours failed to produce any results, and the patient eventually underwent an uncomplicated surgical termination under ultrasound guidance, where a deviated cavity (without cervical stenosis) was noted.

Preliminary placental histology shows ‘worrying features including the markedly convoluted outline of chorionic and focal probable circumferential proliferation of trophoblasts’.

Summary: These placental abnormalities have not been previously reported in relation to post-ablation pregnancy. Uterine contractility may be compromised post ablation, possibly by adhesions.

The merits of medical versus surgical termination in these cases are uncertain.

PP.124
Pregnancy of unknown location (PUL)
Ajmi, A; Watson, S
Homerton University Hospital, London, United Kingdom

Objective: To compare local EPAU practice with local and NICE guidelines; to study the relationship of serum hCG change after 48 hours and progesterone level with final diagnosis.

Background: Pregnancy of unknown location (PUL) is defined as no obvious intrauterine or ectopic pregnancy on scan with positive pregnancy test and no history of complete miscarriage. NICE guidelines state that PUL should be considered ectopic until proved otherwise. Clinical signs and symptoms should be given importance and hCG change and progesterone level should not be used to determine location of pregnancy.

Methods: 50 patients were identified on EPAU between November 2012 and February 2013 who were diagnosed with PUL on first scan. Data were collected and analysed.

Results and conclusions:
- Initial FBC, G&S, hCG and transvaginal scan were done in all the cases.
- 92% had repeat hCG after 48 hours.
- Emergency contact number was given in all the cases.
- 46% had repeat scan.
- Fup of presumed miscarriage: pregnancy test carried out in EPAU in most cases.
- Final diagnosis: 58% miscarriage, 12% ectopic, 24% viable.

PP.123
Pregnancy in reflux nephropathy: our experience
Nisal, M; Hall, M; Carr, S; Singhal, T
University Hospitals of Leicester, Leicester, United Kingdom

Objective: Reflux nephropathy, a leading cause of chronic renal failure in women of childbearing age, leads to pregnancy and neonatal complications and poses risk to babies due to autosomal dominant inheritance. We analysed pregnancies in women with reflux nephropathy.

Methods: Data were collected retrospectively from maintaining databases and case notes of pregnancies in a university hospital between 2004 and 2009.

Results: Of 24 women with mean age 30.15 years (±5.19) had 26 pregnancies. Mean peak creatinine significantly increased during pregnancy from 74.68 to 86.49 (P = 0.0034). Eight women had pre-eclampsia. 4 out of 5 women (80%) who had peak creatinine above 110 μmol/L had fetal growth restriction. None of the 15 women who were followed-up at 1 year had deterioration in renal function. 8 were not followed-up in view of normal renal function at delivery. Nine (34%) women underwent induction of labour due to worsening of creatinine. Vesicoureteric reflux was excluded in 15 babies who had a renal ultrasound scan at 6 week postnatal period. Eleven babies had no imaging studies

Conclusion: We report a series of 26 successful pregnancies in women with reflux nephropathy. Although there was a significant rise in creatinine during pregnancy, it did not affect the pregnancy outcome significantly. Though more than one third of pregnancies required induction of labor due to worsening creatinine, there was no deterioration of renal function at one year post delivery follow-up. Almost all the babies born to mothers with peak pregnancy creatinine >110 μmol/L had growth retardation. Though nearly half of babies had Renal USG, none of them had vesicoureteric reflux.
• 10 out of 12 viable pregnancies had >60% rise in hCG after 48 h.
• Out of 12 viable pregnancies, 11 had progesterone >30 and 1 between 20 and 30
• 2 ectopics also had progesterone >30
• In 80% cases, final diagnosis was within 2 weeks.
• PUL should be considered as ectopic until proved otherwise.
• We are correctly using HCG and progesterone in order to manage PUL, and not to determine location of pregnancy.
• In cases of non-viable pregnancy: advise home pregnancy test in 14 days rather than EPAU follow up in more cases if suitable, according to new NICE guidance.
• More senior review of cases should be organized.
• Reaudit after 1 year.

PP.125
Presentation and management of Swine ‘flu in pregnancy: A case report
Jain, N; Piskowowskyj, N; Yuvaraj; Talar; Madhuri
Glangwilli General Hospital, Carmarthen, United Kingdom

Background: H1N1 influenza (swine ‘flu) has the potential of causing serious maternal morbidity during pregnancy with the maternal mortality of 17–19% in ITU admissions with severe acute respiratory distress syndrome and secondary bacterial pneumonias.

Case: This case reports the acute presentation of a 43-year-old G3P2 in her third trimester of pregnancy who was clinically unwell with tachypnoea, tachycardia metabolic acidosis and severe hypoxia. We will discuss about her initial management, delivery and postoperative ITU support in the multidisciplinary set up. She was treated in the ITU for 28 days with ventilatory support, high specialist centre input and administration of newer antiviral therapy.

Conclusion: This case demonstrates that with high index of suspicion, initial resuscitation, early delivery, multidisciplinary team approach, ventilatory support resulted in the discharge of happy mother and baby home.

PP.126
Preterm delivery – who is most at risk? An audit of a preterm surveillance clinic
Kindinger, L; Teoh, TG
St Mary’s Hospital, Imperial College Healthcare NHS Trust, London, United Kingdom

Objective: To audit and compare rates of late miscarriage and preterm delivery within a high risk population.

Background: Preterm delivery is associated with significant neonatal morbidity and mortality, however cervical screening has a poor positive predictive value (29%, at 15 mm cut off before 24 weeks).

Methods: Audit of referrals to preterm surveillance clinic between January 2011 and January 2013.

Results: Of 160 notes were reviewed. Referrals included previous cervical treatment (CT) (43%), preterm birth before 34 weeks (21%), midtrimester loss (MTL) (26%), uterine anomalies (5%) and multiple pregnancy (3%). MTL was identified as the highest risk group; mean gestation at delivery was significantly lower than the CT group (36+4 weeks vs. 38+4 weeks, P = 0.06, 95% CI 0.5–3.3). 48% with previous MTL required an intervention (progesterone or cerclage) in their subsequent pregnancy, RR 1.79 (CI 95% 1.2–2.6); higher than any other group.

The overall intervention for suspected cervical incompetence was 27% (n = 43). These women received either progesterone pessaries (8%) or a cervical cerclage (19%). Delivery gestation in the intervention group was significantly earlier than those without intervention (mean 36+1 vs. 38+0 weeks, P = 0.03, 95% CI 0.6–3.2). The preterm delivery rate was higher in the ultrasound versus elective cerclage (mean 33.5 weeks vs. 36.7, P = 0.19). Complication rate was high in the cerclage group (30%), including preterm rupture of membranes (n = 15), chorioamnionitis (n = 5), and intrauterine death (n = 4), compared to 16% in the total cohort. A screening cervical length of <25 mm before 20 weeks of gestation indicated good specificity (96%), negative predictive value (94%), however sensitivities were poor (41%) for delivery <34 weeks. Mean delivery gestation was 37.5 weeks (SD = 4.29). 8% delivered <34 weeks and there were 4 MTLs. Overall 10 babies were admitted to NICU and there was one neonatal death.

Conclusion: Invasive ‘rescue’ interventions for cervical incompetence have high complication rates. We advocate early referral to preterm surveillance clinics to ensure early intervention with less morbidity.

PP.127
Prospective audit for induction of labour with propess
Kansra, H; Malik, SN; Adcock, K; Mousa, HA
University Hospitals of Leicester NHS Trust, United Kingdom

Objective: To assess the success rate of IOL using Propess

Methods: Prostaglandins have been used for induction of labour since the 1960s. Different kinds of prostaglandins either intravaginal or intracervical have been used over the period of
time for IOL. Vaginal Propess (sustained release PGE2), one of the commonly used method for IOL is assessed in this study.

Methods: This prospective audit was carried out across 2 hospital sites from June 2012 to October 2012 and included 153 patients. Microsoft excel sheet was used for data collection. We included women with a singleton viable pregnancy in a cephalic presentation of ≥37 weeks of gestation. We excluded cases with history of rupture of membranes.

Results and conclusions: Overall response rate after Propess alone was 110 patients (71%), 43 patients (28%) needed additional prostin for IOL. 80/153 (52%) needed syntocinon. Seventy-four percent of patients achieved a vaginal delivery and 74%(114/153) delivered within 48 h of IOL. 7 patients (4.5%) had hyperstimulation. Primary postpartum haemorrhage (PPH) seen in 17% of cases. 5/6 patients with previous caesarean section had Propess for 12 h and achieved vaginal delivery with no scar rupture.

PP.128
Quality improvement project (QIP) of emergency gynaecology and early pregnancy assessment units

Abdul Raheem, T; Wallace, P; Gokhale
Royal Gwent Hospital, United Kingdom

Objective: To ensure that the EGAU is serving its purpose of providing triage system which reduces patients waiting time and provide short stay facility. This was assessed by measuring compliance of bed managers with the updated referral criteria. To assess patient satisfaction with the service.

Methods: Retrospective collection of data from the SBAR forms filled by bed managers over one month period (from 1st to 31st of October 2012). 16 question questionnaire to patients attending EPAU in November 2012 and EGAU in January 2013.

Results: Total number of SBAR forms = 80. Criteria were overruled 50%. The main causes of the overruling include early pregnancy bleeding suitable for EPAU, hyperemesis without ketonuria, suspected ectopic pregnancy without pregnancy test, menorrhagia without drop in Hb, second trimester problems (spotting, abdominal pain without urinalysis, reduced fetal movement, history of trauma but asymptomatic).

Most patients felt waiting time for appointment and waiting time on arrival were acceptable. Of the 90 EPAU patients, 63 waited for 2 or more days to be seen, yet 71 of 90 were happy with the waiting time for their appointment.

In both units the majority of patients felt questions were adequately answered (72 of 85 EPAU, 27 of 32 EGAU) and investigations adequately explained (78 of 83 EPAU, 27 of 32 EGAU).

Overall 28 of 34 EGAU, and 72 of 90 EPAU, patients rated their experience as excellent, very good or good.

Conclusion: The overall quality of service of the EPAU/EGAU is considered very good. Despite new NICE guidelines recommending emergency early pregnancy problems should be seen within 24 hours, patients are generally happy waiting as long as 2–3 days for scan.

Quality of information and documentation in the SBAR forms which were filled by bed managers need to be improved.

PP.129
Re-audit demonstrating improvements in compliance of operative vaginal delivery RCOG guidelines

Smith, E; Vanes, NK; Lacey, L; Goswami, K
University Hospitals of Coventry and Warwickshire, United Kingdom

Objective: To determine if we are adhering to the RCOG guidelines and CNST standards for operative vaginal delivery and if there has there been an improvement in compliance of standards since our previous audit.

Background: 'The RCOG recommends that obstetricians achieve experience in spontaneous vaginal delivery prior to commencing training in operative vaginal delivery. The goal of operative vaginal delivery is to mimic spontaneous vaginal birth, thereby expediting delivery with a minimum of maternal or neonatal morbidity’. CNST requires regular audit of to ensure compliance to national guidelines.

Methods: A sample of 55 (2012) and 40 (2013) notes were requested respectively, which equated to approx 20% of all operative vaginal deliveries for the selected periods. A 12 month training period followed for junior doctors and regular reminders sent to ensure compliance to RCOG guidelines. Data analysis was performed with Microsoft Excel.

Results and conclusions:

<table>
<thead>
<tr>
<th>Criteria</th>
<th>2012 (%)</th>
<th>2013 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Informed consent</td>
<td>29</td>
<td>95</td>
</tr>
<tr>
<td>Indication recorded</td>
<td>95</td>
<td>100</td>
</tr>
<tr>
<td>Bladder care recorded</td>
<td>84</td>
<td>100</td>
</tr>
<tr>
<td>Patient debriefed</td>
<td>11</td>
<td>70</td>
</tr>
<tr>
<td>Assessment as per guideline</td>
<td>92</td>
<td>97</td>
</tr>
<tr>
<td>Analgesia</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Use of sequential instrumentation</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Operator fully competent</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Decision to delivery interval</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

This re-audit demonstrates a marked improvement in compliance with RCOG standards, through simple reminders (e.g. emails, regular teaching updates by consultants) to junior doctors.

PP.130
Recurrent massive haemorrhagic ascites: A rare presentation of endometriosis

Shetty, N; Veeramreddy, S; Hanna, L
Queen Elizabeth Hospital Woolwich, United Kingdom

Objective: To improve awareness of the gynaecologist to the rare presentation of recurrent massive haemorrhagic ascites in endometriosis, which is a diagnostic dilemma.
Case: A 35-year-old nulliparous lady was first seen by the surgeons 10 years ago when she underwent a laparotomy for a repair of umbilical hernia and divarication of recti. At laparotomy she was found to have 7 litres of fluid in her peritoneum, which was mainly chocolate coloured. Severe pelvic endometriosis was noted. Endometriotic deposits were also seen over the omentum and large bowel. Histology of the suspected lesions confirmed endometriosis. The cytology of ascitic fluid showed that it contained mainly blood with numerous foamy histiocytes and mesothelial cells. She also had menorrhagia, dysmenorrhoea, bleeding PR and dyschezia during periods.

She was subsequently treated with 6 cycles of zoladex with significant improvement in her symptoms. A moderate ascites persisted.

A detailed check was done to exclude cardiac, liver, renal disease and infections including tuberculosis. She had 2 more laparotomies abroad for massive ascites, 5 years ago and 2 years ago. She had a CT guided drainage of 7 litres of haemorrhagic ascitic fluid last year after which she was given 6 cycles of zoladex and referred for IVF services.

Conclusion: Haemorrhagic ascites due to endometriosis is exceedingly uncommon and presents a diagnostic dilemma for the clinician. These patients are usually noncritical with complaints which may be uncharacteristic and are more likely to be seen by emergency clinicians and surgeons. A simultaneous consultation with both general surgery and gynaecology and a high index of suspicion may possibly avoid unnecessary laparotomies with its consequent morbidities.

PP.131
Retrospective analysis of CTG's following induction of labour (IOL) using prostaglandins
Hendry, F; Ulivi, G; Thomson, A
Royal Alexandra Hospital, United Kingdom

Objective: To review current monitoring regimens for identifying fetal distress following insertion of vaginal prostaglandins.

Background: Women undergoing induction of labour (IOL) with dinoprostone vaginal tablets have assessment of fetal wellbeing performed using CTG which is assessed for normality using NICE guidance.

At Royal Alexandra Hospital, fetuses are monitored for 2 hours following dinoprostone and stopped following assessment of normality. Uterine hyperstimulation can occur during IOL with dinoprostone with contractions maximal around 5 hours following insertion.

Methods: All women who underwent an IOL with dinoprostone during December 2012 had their CTG reviewed retrospectively. A pro forma was designed identifying: reason for IOL; gestational age of the pregnancy at the start of the induction of labour; when was uterine activity detected on the CTG; evidence of uterine activity on the CTG.

Results: A total of 49 women were identified.

Abnormalities detected from 30 min to 2 hours:
- Four women had abnormalities on the CTG.
- One demonstrated loss of contact and was kept on for 2 hours 30 min.
- Three traces demonstrated fetal bradycardia necessitating two women to be transferred to labour ward for prolonged CTG traces.
- The women transferred to labour ward were having IOL at 35\textsuperscript{th} and 37\textsuperscript{th} weeks.

Conclusion: CTG monitoring post dinoprostone is essential to ascertain fetal well-being. We have demonstrated that prolonged monitoring is not essential and did not alter fetal outcome. It does however, restrict patients and increase anxiety. The short time period and small population were both limitations to this study.
PP.132
Retrospective audit of investigation of tubal occlusion in new infertility patients
Omar, M; Langton, J
Whiston Hospital, Warrington Road, Prescot, United Kingdom

Objective: 100% of women with risk factors for tubal occlusion should be offered diagnostic laparoscopy.
Background: NICE CG 156 (February 2013) recommendation 62 suggests that if any woman has comorbidities that would lean towards tubal occlusion, that diagnostic lap should be offered. A paper with regards to cost-effectiveness of tubal patency tests by Verhoeve et al., interestingly states that if under 39 (and no known pathology) that the most cost effective fertility management is delay treatment, perform no tubal patency tests, then commence IVF after 12 months.

It also states that if investigating tubal patency- then it is more cost effective to perform HSG (or hysterosalpingo-contrast-sonography-HyCoSy) and then diagnostic lap if needed, then diagnostic lap alone.

Methods: Access to clinic patient lists was via electronic document management system (EDMS). EDMS was used to access the clinic letters, and scanned documentation to elicit the demographics of the couples, and the initial management of any assessment for tubal patency. This was over a chosen retrospective period of four months (Jan–April 2012) to allow for completion of initial investigations and management.

Results and conclusions: Only 6% of patients with risk factors for tubal occlusion went for diagnostic laparoscopy. 82% of the patients with a history suggestive of potential of tubal occlusion had a negative HyCoSy. If the ‘at risk of tubal occlusion’ patients (n = 55/60) in this group all had diagnostic laparoscopies, this would of cost in excess of £90,000 compared to ~£13,000 for HyCoSy for all patients, or £40,000 for HyCoSy and subsequent laparoscopy. In conclusion, women with a history suggestive of tubal occlusion should have HyCoSy performed rather than diagnostic laparoscopy.

PP.133
Retrospective study of induction of labour with propess in women with previous caesarean section
Aref-Adib, M1; Sacco, A2; Yoong, W3; Fakokunde, A3
1Department of Obstetrics and Gynaecology, Queen’s Hospital, Romford, United Kingdom; 2Department of Obstetrics and Gynaecology, Barts Health NHS Trust, London, United Kingdom; 3Department of Obstetrics and Gynaecology, The North Middlesex University Hospital NHS Trust, London, United Kingdom

Objective: To review the safety and efficacy of propess, a 24 hour controlled release vaginal dinoprostone that can be removed immediately if indicated, as a cervical ripening agent for induction of labour (IOL) in women undergoing vaginal birth after caesarean section (VBAC).

Background: Since 1980 the rate of caesarean section (CS) in the UK has increased from 8 to 25%. CS poses significant short and long term risks to women. Pregnant women with a previous caesarean may be offered a VBAC or an elective repeat caesarean section (ERCS). VBAC offers reduced hospital stay, faster recovery and is a desirable outcome for many women. However, VBAC carries a higher risk of uterine rupture, which presents clinicians with a dilemma when these women subsequently need IOL. The optimal use, route and type of induction agent in VBAC remain unclear.

Methods: Data were collected retrospectively from March 2011 to March 2012. Women undergoing VBAC using Propess for IOL were included. A Propess pessary was placed for ≤24 hour with CTG monitoring and re-assessment with vaginal examination.

Primary outcome measures were the success of Propess at cervical ripening and the occurrence of adverse events.

Results: Of 37 cases were included from 4024 deliveries. 33 women achieved cervical dilatation ≥2 cm and 22 reached full dilatation. ARM/SROM occurred in 33 women, with 13 progressing to SVD without further augmentation. Thirteen women were given syntocinon, with six progressing to SVD. 18 women required CS. There were no cases of uterine rupture or intrapartum haemorrhage. Hyperstimulation occurred in two cases.

Conclusion: Propess is an effective cervical ripening agent for VBAC. The decision to use Propess must reflect patient choice and likelihood of success, but offers clinicians an additional tool in reducing the CS rate.

PP.134
Review of compliance with antibiotics guidelines in a tertiary maternity unit
Lyon Dean, C; Narayanan, M; Ayuk, P
Royal Victoria Infirmary, Newcastle upon Tyne, United Kingdom

Objective: To establish if doctors working in the department were aware of the guidelines and if antibiotic prescribing in the department was compliant with the guidelines.

Background: Antibiotic guidelines for maternity were introduced in November 2012.

Methods: A short questionnaire was distributed to all doctors in the obstetrics and gynaecology department regarding their awareness and use of the guidelines.

A prospective audit was conducted over a 2-week period. All maternity inpatients receiving antibiotics were identified using the e-record online prescribing system. The medical notes were used to identify the indication for the antibiotics if this was not evident on the online system.

All prescribed antibiotics were compared with the guidelines to check compliance.
**Results:** Table of compliance with guideline:

<table>
<thead>
<tr>
<th>Indication</th>
<th>Antibiotic choice (%)</th>
<th>Dose (%)</th>
<th>Regime (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chorioamnionitis</td>
<td>66.70</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Group B streptococcus in labour</td>
<td>100</td>
<td>100</td>
<td>57</td>
</tr>
<tr>
<td>Preterm, pre-labour rupture of membranes</td>
<td>100</td>
<td>33</td>
<td>100</td>
</tr>
<tr>
<td>Caesarean section, surgical prophylaxis</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Manual removal of placenta, surgical prophylaxis</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>3rd/4th degree tear, surgical prophylaxis</td>
<td>25</td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td>Endometritis</td>
<td>50</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>Wound infection</td>
<td>100</td>
<td>0</td>
<td>100</td>
</tr>
</tbody>
</table>

**Conclusion:** Some conditions often seen in maternity were noted to be absent from the guidelines, and these have been updated accordingly. Some discrepancies have been noted between the antibiotics guidelines (produced by the microbiology department), and the delivery suite guidelines (produced by the obstetrics department). These issues have been discussed and both guidelines updated. The common errors have been highlighted to current staff. The updated guidelines will be distributed to all doctors joining the department in the future, to ensure better awareness and subsequently compliance with the guidelines.

**PP.135**

**Review of outcome of patients referred to colposcopy with low grade smears after introduction of HPV triage**

**Bapir, M; Arutchelvam, S; Doxford, L; Fincham, D; George, M; Robertson, A**

University Hospital of North Tees, United Kingdom

**Objective:** To assess the correlation between low-grade smear abnormality and findings at colposcopy and histology and to assess the appropriateness of management of the patients with low grade smear, hence avoiding unnecessary LLETZ.

**Background:** Cervical cancer is the 11th most common cancer among women in the UK. HPV 16 and 18 are estimated to be responsible for about 70% of all cervical cancer cases. Treatment at first visit for a referral of low grade smears should be used only in exceptional cases, and only when audit has identified that CIN2/3 or cGIN is present in ≥90% of the excised specimens.

**Methods:** Retrospective analysis of records of all patients referred to colposcopy clinic with low grade smears between July and December 2012. 252 patients with borderline smear and 132 patients with mild dyskaryosis. All data collected from the colposcopy clinic computer database.

<table>
<thead>
<tr>
<th>Number of patients by smear type</th>
<th>Normal colposcopy</th>
<th>Patients had punch biopsy</th>
<th>No CIN</th>
<th>Biopsy Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Borderline smear = 252</td>
<td>14</td>
<td>238</td>
<td>138</td>
<td>51</td>
</tr>
<tr>
<td>Mild Smear = 132</td>
<td>6</td>
<td>126</td>
<td>46</td>
<td>52</td>
</tr>
</tbody>
</table>

**Results:**

![Table 1](image)

<table>
<thead>
<tr>
<th>Patients with high grade lesion</th>
<th>Treatment performed</th>
<th>Histology results (LLETZ)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cold coagulation</td>
<td>LLETZ</td>
</tr>
<tr>
<td>Borderline smear = 49 CIN2-3</td>
<td>8</td>
<td>41</td>
</tr>
<tr>
<td>Mild dyskarosis = 28 CIN2-3</td>
<td>3</td>
<td>25</td>
</tr>
</tbody>
</table>

**Conclusion:** 78–79% of women with low grade smear and HPV+ had normal colposcopy or low grade CIN. However, 21–22% of women had high grade lesion (CIN2–3). Cervical abnormalities requiring treatment are present in 15–20% of the women who are HPV+, our results support that.

**PP.136**

**Review of the recommendation that all women having an elective caesarean section under 39 weeks of gestation should be given corticosteroids**

**Lyon Dean, C; MacDougall, M; Marshall, S**

Royal Victoria Infirmary, Newcastle upon Tyne, United Kingdom

**Objective:** To establish if babies born by elective caesarean section to diabetic mothers at ≤39 weeks of gestation have a high rate of admission to the special care baby unit (S.C.B.U.), and determine if antenatal corticosteroids are necessary for these patients.

**Background:** RCOG Green top guideline No 7 states 'Antenatal corticosteroids should be given to all women for whom an elective caesarean section is planned prior to 38+6 weeks of gestation'. This has significant implications for diabetic patients: LSCS is recommended at 38 weeks of gestation in accordance with NICE guideline CG63; corticosteroids disrupt glycaemic control; additional insulin and blood sugar monitoring is necessary and often requires hospital admission. This is inconvenient for the women and costly to the NHS trust.

**Methods:** A retrospective study of 27,869 consecutive live births at the Royal Victoria Infirmary, Newcastle upon Tyne, UK.
Results and conclusions: The rate of admission to S.C.B.U following spontaneous vertex delivery was 3.15%. Following elective caesarean section it was 4.7%. Our data showed the rate of admission to S.C.B.U. for babies born to diabetics mother, by all modes of delivery, was 2.7%. This fell to 1.38% admission rate for babies born by elective caesarean section to diabetic mothers. Under the current RCOG guideline, 62% of diabetics undergoing an elective section would require antenatal corticosteroids. Without antenatal corticosteroids, no babies born to diabetic mothers by elective section at ≥37 weeks gestation required admission to the special care baby unit.

In women with diabetes, if delivery is planned for ≥38 weeks of gestation, corticosteroids should not be given. However, if delivery is planned for ≤37 weeks then corticosteroids should be administered.

PP.137
Spontaneous rectus sheath haematoma in pregnancy: A case report
Imran, R; Clegg, I; Stephen, G; Kabbur, S; Khizar, S; Sasson, S; Chan, K; Kenn, L
Department of Obstetrics and Gynaecology St Mary’s Hospital, Manchester, United Kingdom; Department of Anaesthesiology Central Manchester Foundation Trust, United Kingdom

Objective: To present a rare condition in obstetric practice: spontaneous rectus sheath haematoma.

Case: A 40-year-old lady, gravida 4 para 3, presented at 38 weeks of gestation with severe abdominal pain. The pain had been sudden in onset and constant for over 1 hour. It was associated with a bout of coughing and sudden collapse at home. On arrival by the paramedics the woman’s blood pressure was recorded as 80/50 mmHg, improving by fluid resuscitation to 120/70 mmHg. However, the patient remained persistently tachycardic, appeared pale and remained in pain. The fetal heart rate was located with the aid of a portable ultrasound machine and found to be 80 bpm. Continuous CTG monitoring was commenced alongside IV fluid resuscitation. A provisional diagnosis of placental abruption was made. An initial improvement in fetal heart rate was followed by a pathological appearance of the CTG warranting admission to the special care baby unit.

In women with diabetes, if delivery is planned for ≥38 weeks of gestation, corticosteroids should not be given. However, if delivery is planned for ≤37 weeks then corticosteroids should be administered.

Intraoperatively, the rectus muscle was found to be ruptured and large formed clots noted underneath the rectus sheath mainly on the left side. No obvious intraperitoneal bleed was found. A live male baby was delivered with a cord arterial pH of 6.95, the baby was stabilised and transferred to NICU for a period of ventilation. The placenta was fundal with no evidence of abruption. Further exploration of the abdominal cavity identified no other source of bleeding.

On review of the published literature since 1990, 12 similar cases were identified of which 3 were of rectus sheath haematoma associated with severe cough.

A diagnosis can be made with diagnostic imaging with the help of MRI/CT scan if mother and baby are stable. USS is also of use but is less specific.

Discussion: This case highlights the typical features of rectus sheath haematoma, namely sudden abdominal pain following coughing. It also highlights the difficulty in distinguishing it from other causes of abdominal pain in pregnancy.

PP.138
Successful use of reduced dose thrombolysis in pregnancy for the treatment of multiple pulmonary emboli
Patel, H; Shukla, A
Northampton General Hospital, Northampton, United Kingdom

Background: Thromboembolism still remains the third most common direct cause of maternal death with mortality rates of 0.79 per 100 000 maternities. We present a case of an acute pulmonary embolus (PE) with circulatory collapse in pregnancy, successfully managed with reduced dose thrombolysis.

Case: A 37-year-old lady presented at 34 weeks of gestation with a 3-day history of worsening shortness of breath and a non-productive cough. On admission she was severely tachycardic at 128 bpm, oxygen saturations were 97% on air, respiratory rate was 20 breaths/min and chest was clear on auscultation. Her age and extensive family history put her at an increased risk of developing venous thromboembolisms. A working diagnosis of PE was made and she was commenced on treatment dose low molecular weight heparin. Ventilation perfusion scan confirmed bilateral PE. Echocardiogram showed a severely dilated right ventricle, with right ventricle hypokinesis and severe tricuspid regurgitation. Despite therapeutic heparin for 4 days she continued to clinically deteriorate with a persistent tachycardia and worsening tachypnoea. There was evidence of circulatory shock therefore a decision for thrombolysis was made. To potentially minimise the significant risks associated with full dose thrombolysis in advanced pregnancy, only half dose alteplase (recombinant tissue plasminogen activator) was administered. There was instant clinical improvement and marked restitution of cardiac function demonstrated on repeat Echocardiogram. No fetal or maternal complications were seen post thrombolysis and the patient delivered spontaneously at 37 weeks of gestation.

Conclusion: The use of thrombolysis in pregnancy has been described previously but this is the first report of successful use of reduced dose thrombolysis. This may represent an alternative to full dose thrombolysis with the aim of potentially reducing the substantial fetal and maternal risks. However further knowledge regarding the risks and therapeutic benefit of reduced dose thrombolysis in pregnancy is required.

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PP.139
Successful use of USS guided MVA (two consecutive cases) and UAE for treatment of caesarean scar ectopic pregnancy (CSEP)
Aslam, N; Gupta, P; Pradhan, P; Wylde, M
Heartlands Hospital, Birmingham, United Kingdom

Objective: We present three cases of caesarean scar ectopic pregnancy (CSEP) managed with MVA and UAE.

Background: The reported incidence varies from 1/1800 1/2216 and the rise in the number of reported cases in recent years is likely to be explained by the increased rate of caesarean sections and improvement in early diagnosis.

Case 1: Of 24-years-old, P2 (LSCS X2) presented at 7/52 with vaginal bleeding and β-hCG was 10 823 IU/L. Ultrasound showed CSEP. She was treated medically with single dose of systemic methotrexate. She had three admissions with abdominal pain and repeat Scan after two months of initial presentation still showed persistent gestational sac with some free fluid. She had USS guided MVA with no complications.

Case 2: Of 45-years-old, G5P2+3 (2 × C-sections) presented at 9/52 pregnancy with vaginal bleeding and right sided abdominal pain. β-hCG was 12 228 and USS showed CSEP. She was treated medically with single dose of systemic methotrexate. She was still symptomatic with abdominal pain and repeat scan showed persistent gestational sac. She had USS guided MVA with no complications.

Case 3: Of 39-years-old, P5, previous four caesarean sections presented at 8 weeks with vaginal bleeding and USS showed live CSEP with signs of scar dehiscence. She had bilateral U&E same day followed by cervical suture and traditional surgical termination of pregnancy with laparoscopic clip sterilisation. Blood loss was minimal and cervical suture was removed 48 hours later.

Conclusion: Expectant management of viable CSEP is likely to lead to emergency hysterectomy if pregnancy progresses beyond 14 weeks, owing to the risk of placenta accrete or percreta and risk of rupture. Medical treatment seems to be safe, but it is difficult to predict the timing of complete resolution of the ectopic mass. Should we give these patients methotrexate, but plan USS guided MVA/SMM in next few days/weeks, more studies are needed to answer this question.

PP.140
Techniques of delivery of a deeply engaged head during lower segment caesarean section (LSCS): Review of literature
Gupta, M; Datta, A
Northampton General Hospital NHS Trust, United Kingdom

Objective: To increase awareness among obstetricians regarding techniques of delivery of a deeply engaged head during lower segment caesarean section LSCS, including availability of training resources.

Background: LSCS in late labour or at full dilatation with a deeply engaged fetal head is a difficult procedure and carries a higher risk of complications for both mother and baby. Although it's a skill vital for obstetricians, there is a lack of training in this area.

Methods: We carried out a literature review to look at various methods and techniques described for delivering a deeply engaged fetal head.

Conclusion: The incidence of deeply engaged head at LSCS is estimated to be 1.5%. When LSCS is carried out in advanced labour or at full dilatation, the intra operative complication rate rises exponentially with increasing cervical dilatation.

Maternal complications are haemorrhage, uterine angle extension, cervical and vaginal tears, urinary bladder injury, leading to an increase in ITU admissions. Fetal complications are asphyxia, jaundice, skull fractures, intracranial haemorrhage. We describe and compare the commonly used ‘push’ technique—which involves pushing up of the fetal head vaginally by an assistant during the LSCS to assist delivery—with the lesser used ‘pull’ technique. The pull technique consists of reverse breech extraction of the fetus. This technique is well described in literature as the method of choice when fetal head is deeply engaged. It has a lower maternal and fetal morbidity rate compared to the push technique.

We also describe Patwardhan technique for delivery. A fetal pillow device designed to aid delivery in this situation is available in the UK. To improve skill, there is availability of simulation-based training in UK.

PP.141
Term pregnancy outcomes in women aged 40 years or over in Dorset County Hospital
Folarin, N; Siddig, M; Arulpragasam, K; Adeeb, T
Dorset County Hospital NHS Foundation Trust, Dorchester, United Kingdom

Objective: To analyse term pregnancy outcomes in women aged ≥40 years versus control group of women aged <40 years.

Background: It is an increasing trend for women to delay childbearing to a later time in their life. In the UK the overall number of live births to mothers aged ≥40 has almost trebled over the past two decades: 9336 in 1989 to 26 976 in 2009. It remained a question, if low risk pregnant women aged ≥40 years be managed differently.

Methods: Retrospective case note review, of deliveries between January 2011 and January 2012 using maternity database; two groups of 100 women: aged ≥40 years and <40 years randomly selected in order of ranking of case notes number.

Results and conclusions: Sample of 190 patients analysed: 100 women aged ≥40 years; 90 women aged <40 years. A lot of similarity in both age groups, majority had BMI < 30. 94% of women aged ≥40 years conceived spontaneously compared to 92.2% of control, with majority in the ≥40 years of age group being multiparous 77%, control 42%.

Antenatal complications were approximately the same in both age groups.
Despite the similarities there was trend towards induction of labour (IOL) for women aged ≥40 years in the absence of any medical or antenatal complication between 39–40 weeks, for age specific reasons alone (30%), with 1:3 ending in emergency C/S for failed IOL. There was no difference in birthweight and neonatal admission.

PP.142
The management of abnormal placentation over a 1-year period at West Middlesex University Hospital
Al-Kufaishi, A; Erasmus, K; Alzouebi, A; Mitchell, S; Emmanuel, J; Cotzias, T
West Middlesex University Hospital, London, United Kingdom

Objective: To investigate whether all elective caesarean sections (CS) for placenta praevia are justified.

Background: The number of patients having elective CS is increasing and changes to NICE Guidance means there is the potential for this to escalate. However, NICE and the RCOG have published guidance to reduce unnecessary procedures. The RCOG in 2011 included in its green top guidance that any woman with a placental edge less than 2 cm from the internal os, in the third trimester, should be delivered by CS. In addition to this numerous preoperative measures to reduce the risk of operative complications were recommended.

Methods: A retrospective cohort analysis of all elective CS carried out over a 1-year period was conducted.

Results and conclusions: Thirty six of the 441 (8.2%) elective CS carried out over a 1-year period were for women with a low lying placenta or vasa praevia. Five of the 36 (14%) patients had had at least one previous CS delivery. Fourteen patients were delivered prior to the recommended 38 weeks of gestation and 2 (14%) of these patients had no clear indication for early delivery but no resultant admissions to the neonatal unit.

14% patients had the risk of hysterectomy discussed preoperatively but 9% had no consultant presence at the time of procedure. 54% had an estimated blood loss greater than 1.5 L with 11% having a major obstetric haemorrhage.

The majority of patients delivered had appropriate preoperative counselling and indication for their CS. Recommendations included increased use of patient information leaflets, improved documentation and the use of cell salvage.

PP.143
The management of obesity in pregnancy and childbirth: An audit of practice in a district general hospital
Salama, M; Harbidge, A; Morsi, H
The Dudley Group of Hospitals NHS Foundation Trust, Dudley, United Kingdom

Objective: To audit the local practice in management of women with high BMI against the standards set in the CMACE/RCOG Joint Guideline; Management of Women with Obesity in Pregnancy (2010).

Background: Obesity is a growing problem in the UK, and the West Midlands has the highest percentage of obese adults (29%). This has a significant impact on pregnant women during pregnancy, childbirth and after delivery.

Methods: A retrospective audit of the management of obese women in a sample of 100 women attending our hospital in 2012. Data collected included ante- and post-natal complications, planned and actual mode of delivery and neonatal complications. Local practice was audited as to the following guideline standards; folic acid and Vitamin D supplementation, screening for gestational diabetes, assessment of the risk of thromboembolism, ante-natal anaesthetic review, grade of attending staff at delivery, active management of 3rd stage of labour and post-natal thromboprophylaxis.

Results: Obesity was associated with an increase in some of the ante- and post-natal complications. Compliance rates to guideline standards varied between 5–100% (Figure). These were particularly lower for preconceptual recommendations, and when documentation was not very accurate.

Conclusions: Awareness of the impact of obesity in pregnancy should be raised among midwives, obstetricians and GPs. Auditing local practices will highlight the points of weakness and help develop local guidelines that reduce the gap between the set standards and actual practice. We have suggested introducing stickers for obese patients to improve compliance with the standards. We plan to re-audit in 1 year to assess the response to the recommendations.

PP.144
The prediction of preterm delivery in twins: an individual patient data bivariate meta-analysis and systematic review
Kindinger, L1; Ashrafian, H2; Poon, L3; Darzi, A2; Nicolaides, K3; Teoh, TG1
1Department of Obstetrics and Gynaecology, St Mary’s Hospital, Imperial College Healthcare NHS Trust, London, United Kingdom; 2Department of Surgery and Cancer, St Mary’s Hospital, Imperial College Healthcare NHS Trust, London, United Kingdom; 3Harris Birthright Research Centre for Fetal Medicine, King’s College Hospital, London, United Kingdom

Objectives: To assess the accuracy of cervical length measurements in the prediction of preterm delivery in twins.
**Background:** Twin birth rate as increased 70% since in the 1980s, presenting an increasing burden on the health service as 60% deliver preterm. Preterm delivery is the leading cause of neonatal morbidity and neurologic deficit. There is a need for a cost-effective test to predict spontaneous preterm birth (sPTB) in twins. Currently, cervical length measurements are widely used in the prediction of sPTB in singletons.

**Methods:** MEDLINE and Embase searches identified studies reporting on the accuracy of cervical length (CL) for prediction of sPTB preterm birth before 28 weeks in twins. Inclusion-exclusion criteria were applied. Individual patient level data were obtained and a bivariate model meta-analysis was performed. Summary receiver–operating characteristics (ROC) curves were generated plotting the individual and summary points of sensitivity and specificity for the defined gestational ages at testing.

**Results:** Data from a total of 3621 women were analysed from the 10 eligible studies. When cervical length measurements are taken between 20 and 22 weeks of gestation, the sensitivity and specificity for spontaneous birth before 28 weeks are 23% and 98% for <20 mm, and 45% and 95% for <25 mm respectively. For CL testing between 22 and 24 weeks of gestation, the sensitivity and specificity are 61% and 95% for <20 mm, and 81% and 92% for <25 mm respectively.

**Conclusion:** Sensitivities of CL measurements are generally poor, with good specificity for preterm birth in twins. As CL cut offs increase, sensitivity improves at the expense of specificity. This study demonstrates the gestational age to measure cervical length in twins for most accurate prediction of preterm delivery before 28 weeks is between 22 and 24 weeks. A defined short CL of 25 mm at this gestation, sensitivity increases to 91%, with a positive likelihood ratio of 10.4.

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**PP.145**

**The role of MRI and chest X-ray in complex atypical hyperplasia**

**Biswas, S; Haughney, R**

Kettering General Hospital, United Kingdom

**Objective:** Our unit routinely performs an abdomen/pelvis MRI and a chest X-ray (CXR) on all cases of complex atypical hyperplasia (CAH), the same as for endometrial carcinoma (EC), to exclude spread/myometrial invasion before deciding on treatment. The objective of this study was to assess the need for preoperative radiological investigations.

**Background:** EC is the most common gynaecological cancer in the UK. Endometrial hyperplasia is three times more common. It is a common diagnosis in women presenting with an abnormal bleeding pattern and it is a recognised premalignant condition. The rate of concurrent EC in women diagnosed with CAH has been reported as high as 17–52%.

Standard treatment of CAH in the UK is the same as for early stage invasive disease.

There is no clear published guideline on the preoperative investigations of CAH.

**Methods:** All cases of CAH with a suspicion of EC from 2009 to 2011 were identified and the results of MRI and CXR findings were compared to the final histology report.

**Results:** There were a total of 33 cases. Of those, MRI findings could not be obtained in eight cases and CXR findings could not be obtained in eight cases.

Of the 25 cases of CAH with MRI, 13 had no evidence of myometrial invasion, eight cases had Stage 1A (<50% involved), three cases had Stage 1B (>50%) and one case had Stage 1C disease (serosa involved). All of these MRI stagings were confirmed histologically after hysterectomy.

Of the 25 cases having CXR, all had negative findings.

**Conclusion:** This highlights that preoperative MRI is useful in detecting myometrial invasion and planning the therapeutic strategy for cases of presumed CAH, as a significant number do, in fact, have invasive disease.

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**PP.146**

**The role of ultrasound in the diagnosis and management of normal intrauterine pregnancies after a caesarean scar ectopic pregnancy**

**Munyame, CR; Vaithilingam, N**

Queen Alexandra Hospital, Portsmouth Hospitals NHS Trust, United Kingdom

**Background:** Caesarean scar pregnancy is defined as an ectopic pregnancy embedded in the myometrium of a previous caesarean scar with an incidence of 1:1800 to 1:2216 pregnancies. Subsequent viable intrauterine pregnancies occur, however the role of ultrasound in confirmation of a viable pregnancy and monitoring scar thickness during the pregnancy is useful to avoid the complication of scar dehiscence or scar rupture. We present two cases of subsequent intrauterine pregnancies that occurred within our unit in the last 5 years where early confirmation, regular scar thickness scanning and consultant lead management lead to a good pregnancy outcome.

**Discussion:** The treatment of a scar ectopic pregnancy includes local resection of the ectopic gestational mass, dilatation and curettage (D&C), and systemic or local administration of methotrexate. These methods could further weaken the myometrium. The use of an early high resolution transvaginal...
ultrasound scan is essential to exclude the recurrence of a scar ectopic. Ultrasound permits accurate assessment of the lower uterine segment thickness, (assessing for myometrial notching or complete dehiscence) and therefore can potentially be used to predict the risk of uterine rupture.

PP.147
The use of ACTIM-PROM in the diagnosis of prelabour rupture of membranes
Morris, A; Hartley, J; Shantha, N
Royal Lancaster Infirmary, United Kingdom

Objective: To assess the performance of ACTIM-PROM in the diagnosis of term and preterm prelabour rupture of membranes.

Background: The diagnosis of prelabour rupture of membranes can be difficult in the absence of obvious liquor on speculum examination. Failure to diagnose can mean admission, overtreatment or risk of chorioamnionitis and failure to transfer to a unit with suitable neonatal facilities. At term a false positive diagnosis leads to unnecessary induction of labour.

ACTIM-PROM tests for the presence of insulin like growth factor binding protein -1, present in high concentrations in amniotic fluid. The sensitivity and specificity compare favourably with the fibronectin test. Results are available within 5 min at the bedside.

Methods: The details of all patients in whom the test was used, were collected over a 3 month period. Data were extracted from all 24 sets of notes after the expected due date.

Results and conclusions: There were 7 positive results and 17 negative. Of the 7 positive tests, 3 were in preterm gestations resulting in appropriate management with steroids and erythromycin and 4 were in term gestations who were appropriately augmented after 24 hours. The mean time to delivery in the preterm group following a positive test was 6.2 days. Of the 17 patients with negative tests, 11 were preterm. The mean time to delivery in this group was 55.2 days, P = 0.003. There was 100% sensitivity and specificity, and 100% positive and negative predictive values.

ACTIM-PROM test is a simple bedside test, reliable in correctly diagnosing ruptured membranes in both preterm and term gestations. A negative test excludes those with intact membranes allowing discharge home with associated cost savings.

PP.148
Third time unlucky: three tubal ectopic pregnancies in the same fallopian tube. A case report
Bano, R; Mahmood, T
Victoria Hospital, Kirkcaldy, Scotland

Objective: To highlight the need of vigilance in diagnosis of ectopic pregnancy in those who had previous salpingectomy.

Case: A 28-year-old woman, Gravida 4, Para 0 signage presented with a history of amenorrhoea of 6 weeks duration. She had a positive urine pregnancy test. Her first pregnancy was a spontaneous miscarriage in 2008 at 6 weeks of gestation. Her second pregnancy was a right sided cornual ectopic pregnancy managed by the administration of Methotrexate injection. In her third pregnancy she presented with history of 5 weeks of amenorrhoea and lower abdominal pain. A transvaginal ultrasound scan showed a vascular area in the right adnexa with the presence of free fluid in the pouch of Douglas. At operative laparoscopy, presence of tubal ectopic pregnancy in the middle of the right fallopian tube was noted. Right partial salpingectomy was performed by removing only the middle portion of the tube containing the ectopic pregnancy. In her fourth pregnancy she presented at six weeks of amenorrhoea and her BHCG level was 4258 IU/L. Her pelvic TVUS did not show evidence of intrauterine pregnancy and there was free fluid in the pelvis. A decision was made to perform a laparoscopy and ectopic pregnancy was noted in the distal segment of the right fallopian tube so a laparoscopic salpingectomy containing this ectopic pregnancy was carried out.

Conclusion: This case emphasises that salpingectomy too carries the potential for recurrent ectopic pregnancy on the same side hence the need for clinical awareness and vigilance.

PP.149
Total abdominal hysterectomy (TAH) complicated by postoperative Heparin-induced thrombocytopenia (HIT)
Ramzan, I; Abdul Raheem, T; Gokhale, L
Royal Gwent Hospital, United Kingdom

Objective: To increase awareness of HIT in patients receiving heparins and importance of multidisciplinary approach in the management of HIT.

Case: An 80-year-old female was admitted for total abdominal hysterectomy and bilateral salpingoophorectomy for right complex ovarian cyst. Her past medical history was atrial fibrillation, for which she was receiving daily 4 mg of warfarin. Warfarin was discontinued 5 days preoperatively and therapeutic dose of LMWH 12 500 IU SC OD was commenced. Last dose of LMWH was given 24 hours prior to surgery. Operation was uneventful. Therapeutic dose of LMWH and warfarin were re-started the following day. The aim was to have INR more than two on two consecutive days before stopping LMWH. On the day 5 post procedure, patient developed a fall in the platelet count from 138 to 35 × 10⁷/L. Heparin induced thrombocytopenia was suspected and confirmed by detection of PF4-antibodies with the pre test probability score 6. Clinically patient was well, with no signs of thromboembolic complications. LMWH and warfarin were discontinued. Patient was commenced on argatroban, direct thrombin inhibitor, with 12 hours monitoring of LFT and APTT. APTT stayed within normal range and after recovery of platelets on day 3, warfarin was re-commenced. Patient was discharged home on the warfarin with INR in the therapeutic range.

Results and conclusions: Awareness of HIT among gynaecologists will allow early involvement of the haematologist. Early diagnosis of HIT improves prognosis and reduces the risk of thromboembolic complications. Even though incidence of HIT is
10 times less with the LMWH, acute decrease in the platelet count more than 50% in patients receiving heparin should suspect HIT. Patients receiving heparin following major surgery are at a higher risk of developing HIT.

PP.150
Training in cosmetic and reconstructive gynaecology
Farquharson, M; Sircar, S
Wishaw General Hospital, NHS Lanarkshire, United Kingdom

Objective: Assess current teaching and requirement for a teaching package in cosmetic and reconstructive gynaecology by trainees and consultants in Scotland.

Background: Cosmetic and reconstructive gynaecology is poorly covered in obstetrics and Gynaecology. Cosmetic gynaecology remains controversial but reconstructive gynaecology is having an increasing role in the management of vulval cancer. It is important for trainees to have adequate knowledge of these areas to be able to advice, consent and refer patients appropriately.

Methods: An online questionnaire using SurveyMonkey was sent by email to all obstetric and gynaecology trainees and consultants in Scotland.

Results and conclusions: Of 119 responses from a possible 435 were received. 34 responses had received teaching in cosmetic/reconstructive gynaecology compared to 85 responses that had never received teaching. The knowledge of cosmetic and reconstructive gynaecology was felt to be important to their training in 70.3% of all responses. 67.3% of responses believed that an online computer assisted learning package on cosmetic/reconstructive gynaecology would be/would have been useful with 75% of obstetrics and gynaecology trainees responding positively. There is currently limited teaching in obstetrics and gynaecology on cosmetic and reconstructive gynaecology. The majority felt that a computer assisted learning package (CAL) on the topic would be useful and of benefit during their training.

PP.151
Uncovering the complex relationships between maternal age, antenatal detection rates, and pregnancy outcome in cases of Down Syndrome
Jordan, C; Berry, LE; Budd, JLS; Mousa, H; Draper, ES
Leicester Royal Infirmary, University Hospitals of Leicester, University of Leicester, Leicester, United Kingdom

Objective: To use data from the East Midlands and South Yorkshire Congenital Anomaly Register (EMSYCAR) to explore the complex and changing relationships between antenatal diagnosis of DS, increasing maternal age and changing attitudes to termination over fifteen years.

Background: Screening for Down Syndrome (DS) must be offered to all pregnant women in the UK, irrespective of age, between 10^{10} and 20^{10} weeks of gestation. Current targets require antenatal detection rates between 75% and 90% of screened women.

Methods: Of 1805 cases of DS were identified in 922 216 births between 1998 and 2011, an overall prevalence of 19.57/10 000. Cases were analysed by maternal age and pregnancy outcome, with mean gestational age at diagnosis calculated for each age group by cohort year.

Results and conclusions: Of 1025 DS cases (56.8%) were diagnosed antenatally, with the mean gestational age at diagnosis decreasing from 32 weeks in 1998/2000 to 20 in 2009/11. However, 49.1% (CI 42.1–56.0) of DS cases in mothers under 25 were diagnosed antenatally, compared with 62.5% (CI 59.4–65.6) for mothers over 35. While termination rates fell over time, they also differed significantly between age groups. 67.0% (CI 57.0–75.9) of mothers <25 terminated an affected pregnancy compared with 83.7% (CI 80.5–86.5) of those aged >34. Termination rates over time fell more abruptly among the youngest mothers. Despite known variation in birth prevalence of DS with maternal age, more research is needed to determine the role of maternal age in choices concerning screening uptake, consequent antenatal detection and subsequent decisions affecting pregnancy outcome.

PP.152
Undiagnosed breech births in a tertiary centre
Johns, N; Thimma Vidyasagar, A
Birmingham Women’s Hospital, United Kingdom

Objective: To reduce the number of undiagnosed breech at onset of labour.

Background: Of 3–4% of term fetuses are breech at delivery. Diagnosis of breech early in labour gives opportunity to discuss the options of mode of delivery with the lady and reduce perinatal morbidity and mortality.

Methods: The archive system of electronic intrapartum K2 Guardian was used to identify cases of spontaneous breech vaginal deliveries and emergency caesarean sections with the indication of breech presentation between 1 April 2012 and 31 March 2013.

Results: Of 60 spontaneous vaginal breech deliveries were identified from the K2 archive. 40% (24/60) were at preterm gestations, ranging from 20–36 weeks gestation. 6.7% (4/60) were known intra-uterine deaths of varying gestational ages. 30% (18/60) were second twins. 23.3% (14/60) were term (gestation ≥37/40); of these cases 13/14 was undiagnosed prior to the onset of labour.

63 cases of emergency caesarean section for the indication of breech presentation were identified from the K2 archive. 9.5% (6/63) were at preterm gestations, between 35 and 36 + 6/740. 20.6% (13/63) were diagnosed and due for elective caesarean section, but attended prior to date of elective CS in spontaneous labour.

30.2% (19/63) were diagnosed and due for elective caesarean section, but attended prior to date of elective CS with spontaneous rupture of membranes.
15.9% (10/63) were undiagnosed prior to attending with spontaneous rupture of membranes, but not in labour. All appeared to be diagnosed on admission.

23.8% (15/63) were undiagnosed prior to the onset of labour.

**Conclusion:** 28.57% (8/28) undiagnosed term breech from birth centre and 17.86% (5/28) from induction suite. Presentation scanning on admission to induction suite and educational programme at birth centre for early examination to identify the presentation may possibly improve the recognition rates and reduce the perinatal morbidity and mortality.

**PP.153**

Uterine arterio-venous malformation as a cause of secondary postpartum haemorrhage: A case report

*Jordan, C; Gebeh, A; Barney, O; Khari, M*

**Obstetrics & Gynaecology, University Hospitals of Leicester NHS Trust, Leicester, United Kingdom**

**Background:** Haemorrhage is a common cause of maternal morbidity and mortality. In the 2006–2008 triennial report into maternal deaths, haemorrhage accounted for the 6th most common cause of maternal death in the UK. We present a case of secondary postpartum haemorrhage (PPH) due to uterine arterio-venous malformation (AVM).

**Case:** Mrs AY, a 36-year-old G1P1, booked and delivered vaginally at hospital at 38 weeks. She had a third degree tear and two-litre PPH requiring two units of blood. Three weeks postnatally whilst visiting family she had secondary PPHs and presented at two different hospitals. Both treated her for presumed endometritis and she was transfused one unit of red cells.

She presented at our hospital having collapsed on the motorway following a large PPH. She was stable in the emergency department and transferred to Obstetrics for review. She had a further episode of heavy vaginal bleeding shortly after transfer, which required aggressive resuscitation. When stabilised an Ultrasound scan was performed which raised the possibility of arteriovenous malformation. Subsequent CT scan and uterine artery embolisation with micro coils via selective catheterisation of the left uterine artery was performed.

**Discussions:** AV malformations are rare causes of uterine bleeding and can be life threatening if not identified early and managed appropriately. In this case, the recurrent heavy bleeding requiring blood transfusions in the absence of an obvious cause of PPH raised the suspicion of a uterine AVM. Doppler ultrasound is a cheap and non-invasive way of detecting uterine AVM as this case report demonstrates, enabling timely intervention by interventional radiology and prevention of a potentially catastrophic surgical ERPC had this been attempted.

**PP.154**

Uterine arteriovenous malformation as a rare cause of secondary postpartum haemorrhage

*Goh, SE; Anand, S; Martindale, E*

East Lancashire Hospitals NHS Trust, Burnley, United Kingdom

**Objective:** Uterine arteriovenous malformation (AVM) is a rare but potentially life-threatening cause of secondary postpartum haemorrhage (PPH). Clinical awareness of this rare condition is vital for prompt diagnosis and management.

**Background:** Our case reports a 30-year-old multigravida who presented with multiple episodes of intermittent secondary PPH after caesarean section, which were abrupt and heavy. Dilatation and curettage procedure was carried out to exclude retained placental tissue. Angiography revealed rapid uterine artery filling with abnormal vasculatures, suggestive of AVM. This was treated with uterine artery embolisation (UAE) but patient had another episode of torrential bleeding 9 days later. Hysterectomy was performed. Histopathology reported many prominent dilated blood vessels in the myometrium. Patient had an uneventful recovery postoperatively.

**Methods:** A literature search was performed on OVID databases (Medline, EMBASE, ERIC) using the search term ‘uterine arteriovenous malformation’ for articles published within the last ten years. Seven relevant articles are included.

**Conclusion:** Uterine AVM usually presents as intermittent heavy vaginal bleeding refractory to conventional therapies. Acquired uterine AVM often associate with uterine trauma such as after uterine surgery. Diagnosis can be achieved through ultrasonography, computed tomography, magnetic resonance scan, angiography, or histopathology after hysterectomy. Symptomatic uterine AVM had traditionally been treated with hysterectomy. Recent advances and experiences have enabled UAE to be considered as a viable alternative where preservation of fertility is possible. Though the histology in our case was not confirmative of AVM, the clinical presentation and angiography supported the diagnosis. With increasing number of caesarean sections, AVM must be considered in the differential diagnosis of secondary PPH.

**PP.155**

Uterine arteriovenous malformation leading to secondary postpartum haemorrhage

*Deshpande, R; Macpherson, M*

Queens Medical Centre, Nottingham University Hospitals NHS Trust, Nottingham, United Kingdom

**Background:** Uterine arteriovenous malformation (AVM) is a rare clinical entity. AVM consists of a proliferation of vessels of different sizes connected with fistulas which have characteristics of both arteries and veins on histology. Uterine AVM can be congenital or acquired. They are associated with increased blood flow. Most often they are thought to be asymptomatic but can present with irregular or heavy vaginal bleeding. Acquired AVM are reported to be caused by pelvic trauma, surgery, neoplasm, inflammation, diethylstilbestrol exposure or trophoblastic disease.
Uterine evacuation using curettage can lead to significant haemorrhage. During pregnancy uterine AVM are known to proliferate. Till date, only a single case of uterine AVM presenting with recurrent antepartum haemorrhage and primary postpartum haemorrhage is reported. To the best of our knowledge, this is the first case of secondary PPH caused by uterine AVM which was managed successfully with uterine artery embolisation.

**Case:** A 33-year-old woman with past history of myomectomy conceived following IVF treatment. She had DCDA twin pregnancy with a 5 cm uterine fibroid. She developed pre-eclampsia and was managed with labetalol. An emergency caesarean section was performed for worsening pre-eclampsia. Postoperatively, she had reduced urine output with abnormal renal function tests. She also complained of abdominal pain with significant abdominal distension. A CT scan was requested to exclude intestinal obstruction. On return from imaging, she bleeding was noted. The CT scan showed blood within the uterine cavity and demonstrated uterine AVM with active haemorrhage. Bilateral uterine artery embolisation was performed followed by the evacuation of blood clots from uterine cavity. She made good recovery and did not have any further episodes of bleeding.

**Conclusion:** Chronic constipation can result in formation of a faecaloma. Management of this rare condition is challenging and requires careful consideration; surgical input may precipitate preterm delivery and distortion of maternal anatomy has serious implications during labour and delivery. Complications include malpresentation, labour dystocia, rectal tear, and colostomy. Postoperatively patients require close monitoring for the risk of developing ileus and Ogilvie syndrome. Megacolon and faecal impaction are associated with Hirschprung disease and inflammatory bowel disease, which should be excluded.

**PP.156**

**Uterine displacement secondary to megacolon and faecaloma in pregnancy**

*Geris, S; Reid, A; Syeda, K; Habeeb, H*

Medway Maritime Hospital, Gillingham, United Kingdom

**Background:** Megacolon and faecaloma are incredibly rare complications of pregnancy; the incidence is unknown. Constipation is common, affecting 16–26% of pregnant women. It is rarely a cause for clinical concern and routinely treated with medication and diet alteration.

**Case:** An 18-year-old primigravida attended a scan at 21 weeks of gestation. Transvaginal measurement of the cervical length was difficult due to displacement by a pelvic mass. She reported a 3 week history of passing loose stools. MRI showed an enlarged 10 × 10 cm rectum and sigmoid colon, with no evidence of teratoma. Rectal examination revealed gross faecal impaction which required manual evacuation. Steroids were given prior to the procedure as a precaution for preterm labour. The uterus was displaced upwards and to the right by the loaded rectum and descending colon resulting in unstable lie requiring caesarean section. Retroperitoneal assessment of the uterine incision found it was made at the level of cervical opening. The cervix was pushed upwards due to the hugely distended bowel giving rise to the false appearance of a lower uterine segment covered with large blood vessels, with a resultant blood loss of 5 litres.

**Conclusion:** This case highlights that visible threads in a scenario of difficult removal may indicate cervical perforation. With subsequent institution of appropriate diagnostic and operative measures to confirm or exclude such possibility.

**PP.157**

**Wandering Mirena® and visible thread**

*Omer, R; Cooper, A; Shoukrey, M*

Dorset County Hospital, Dorchester, United Kingdom

**Objective:** To highlight the importance of clinical suspicion of a misplaced intrauterine contraceptive device in the context of difficult removal.

**Background:** Perforation of the uterus by an intrauterine contraceptive devise IUCD is a potentially serious complication, with reported incidence of 0.5–1/1000 insertions. The risk of perforation is increased in lactating women, in women with fixed retroverted uteri, and during the postpartum period.

**Case:** A 32-year-old, para 3, all spontaneous vaginal deliveries, had a Mirena® (Bayer HealthCare, Pittsburgh, PA, USA) IUS inserted by her general practioner (GP) for contraception one year postpartum. She decided to remove the Mirena® IUS one year later because she was bleeding irregularly. She opted to remove the coil and restart on combined oral contraceptive pills. As the strings were visible, the GP attempted to remove the Mirena® IUS but it proved to be difficult. An ultrasound scan showed the Mirena® IUS was protruding from the cervical canal into the anterior myometrium, lying close to the anterior uterine border. Hysteroscopy showed the Mirena® IUS had perforated the anterior cervical wall. Cystoscopy done with no evidence of bladder wall perforation. A subsequent laparoscopy revealed that the coil was lying in its entirety outside the uterus within the uterovesicle fold in very close proximity to the posterior wall of the urinary bladder. The peritoneum overlying the coil was excised while the coil was grasped under tension to facilitate further dissection with monopolar diathermy. This was done until the coil was completely freed and excised. There was minimal bleeding and the bladder integrity was rechecked by methylene blue dye which showed the bladder to be intact.

**Conclusion:** This case highlights that visible threads in a scenario of difficult removal may indicate cervical perforation. With subsequent institution of appropriate diagnostic and operative measures to confirm or exclude such possibility.
PP.158
What can we tell parents when a fetal thoracic lesion is identified antenatally?
Walker, L; Cameron, H
Sunderland Royal Hospital, Sunderland, United Kingdom

Objective: To produce a large case series of fetuses affected with congenital thoracic lesions, looking primarily at antenatal progression and pregnancy outcomes.

Background: Fetal thoracic lesions have a wide spectrum of clinical severity. This can cause difficulty in antenatal counselling.

Methods: Information was collected retrospectively from Northern Congenital Abnormality Survey (NorCAS) data at the Regional Maternity Survey Office (RMSO) based at Newcastle University. Further neonatal outcome data were requested following Caldicott approval. All congenital cystic adenomatous malformations (CCAM) and pulmonary sequestration sequences (PSS) from 1988 to 2010 in this population were reviewed.

Results and conclusions: Of 116 pregnancies affected with CCAM and PSS were identified. Results looked at all HVS taken over a 15-month period to determine numbers performed, culture results obtained and the cost to the unit in relation to benefit to women.

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</tbody>
</table>

Conclusions: Our results show the prevalence of Group B Strep in the South West is only 7.8%. The majority of swabs performed either did not culture (65%) or grew organisms able to be treated empirically (24.4%). The estimated cost of processing a HVS to the NHS is £24.82. As such, approximately £127,972 was spent across these hospitals in a 15-month time period. The vast majority of these swabs, we suggest, did not guide clinical management. A more judicial usage of HVS in pregnant women could result in a significant cost saving for the NHS without jeopardising patient care.

PP.159
What is the value of a high vaginal swab in pregnancy: A multicentre retrospective assessment of practice
Phillips, A1; Richardson, A2; O’Donovan, O3
1Royal Cornwall Hospital, Traliske, United Kingdom; 2Derriford Hospital, Plymouth, United Kingdom; 3Royal Devon and Exeter Hospital, Exeter, United Kingdom

Objective: To review practice across three hospitals in the South West in relation to the number of high vaginal swabs (HVS) performed in hospital during pregnancy and the significance of the microbiological results obtained.

Background: Concerns had been raised about the culture of performing a HVS on all pregnant women undergoing a speculum examination. We wished to look at all HVS taken over a 15-month period to determine numbers performed, culture results obtained and the cost to the unit in relation to benefit to women.

Methods: A retrospective review of microbiology results from all HVSs taken for any indication between 29 January 2009 and 1 July 2011 across three hospitals.

Results: Of 5156 swabs were performed with considerable geographic variation (Truro 43.3%, Exeter 34.4% and Plymouth 22.3%). Results were as follows:

<table>
<thead>
<tr>
<th>Birth plan</th>
<th>No birth plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>No growth</td>
<td>3348 (64.9%)</td>
</tr>
<tr>
<td>Yeast</td>
<td>1256 (24.4%)</td>
</tr>
<tr>
<td>Group B Strep</td>
<td>481 (7.78%)</td>
</tr>
<tr>
<td>Staph A</td>
<td>57 (1.11%)</td>
</tr>
<tr>
<td>Mixed anaerobes</td>
<td>44 (0.85%)</td>
</tr>
<tr>
<td>Mixed organisms</td>
<td>8 (0.16%)</td>
</tr>
<tr>
<td>Others</td>
<td>42 (0.82%)</td>
</tr>
</tbody>
</table>

Conclusions: What women want and what women get
Arshad, J; van der Meer, A; Wuntakal, R; Kopeika, J
Obstetrics Department, Guy’s and St Thomas’ NHS Trust, London, United Kingdom

Objective: To evaluate the influence of birth plans with respect to the differences in demographics and mode of delivery in women with and without birth plans.

Background: The National Children’s Trust suggest that birth plans give confidence, comfort and a sense of control. Do birth plans always go to plan?

Methods: Retrospective study in a tertiary unit at Guy’s and St Thomas’ NHS Trust in London. The latest 99 deliveries were reviewed including high and low risk pregnancies. Information obtained: Presence of birth plan, desired mode of delivery, actual mode of delivery, age, parity, previous caesarean sections and job title.

Results:

<table>
<thead>
<tr>
<th>Birth plan</th>
<th>No birth plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number</td>
<td>29 (29%)</td>
</tr>
<tr>
<td>Vaginal Delivery (VD)</td>
<td>15 (52%)</td>
</tr>
<tr>
<td>Instrumental</td>
<td>3 (10%)</td>
</tr>
<tr>
<td>Emergency Caesarean Section (EMCS)</td>
<td>9 (31%)</td>
</tr>
<tr>
<td>Elective Caesarean Section (ECS)</td>
<td>2 (7%)</td>
</tr>
<tr>
<td>Age mean ± SD</td>
<td>32.9±4.7</td>
</tr>
<tr>
<td>Primips</td>
<td>19 (66%)</td>
</tr>
</tbody>
</table>

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Women with birth plan were significantly older (32.9 years) than ones without (29.5 years) \((P < 0.005)\). There was no significant difference in mode of deliveries between the two groups. Caesarean section rate was similar at around 30%. Only 58% of women who made a birth plan had their desired mode of delivery.

**Conclusions:** Birth plans were introduced without any randomised control trials. Presence of birth plans do not have much value in giving a sense of confidence, comfort and control to the outcome of labour. We suggest women are given accurate information antenatally with regards to birthing outcomes and possible emergency scenarios. So we can achieve a safe mother and safe delivery of a healthy baby. This will give women more realistic expectations, especially if things don’t go according to ‘plan’, when they are at their most vulnerable periods of their lives.

**Objective:** Previous research into healthcare professionals’ (HCPs) perceptions of palliative care has focused on knowledge and education. Much less is known about the individual understanding and interpretation of palliation and there are no previous gynaecology specific publications. This study therefore aims to explore the understanding, experience and perception of palliative care amongst HCPs in the gynaecology setting.

**Background:** 58% of deaths in the UK occur in hospital and most patients are not under the care of a specialist palliative care team. Serious deficiencies in end of life care have been reported and the End of Life Care Strategy 2008 highlighted the need to reduce inequalities and improve education for all HCPs. Gynaecologists may be involved in ‘breaking bad news’, assessment and treatment planning for women with incurable gynaecological cancer so we must be able to identify, recognise and manage palliative needs. Women with gynaecological cancers look to us for guidance and significant disparities in the understanding and perception of palliation leads to inequalities, and impacts on patient confidence, decision making and overall satisfaction with treatment.

**Methods:** This is a qualitative study using Interpretative Phenomenological Analysis. This methodology allows us to obtain detailed descriptive data from each participant, giving insight into the ‘lived world’ experience of caring for patients with palliative needs. Semi-structured interviews were completed with 11 HCPs from the gynaecology department.

**Results and conclusions:** Three main themes were identified: ‘I’m not sure I’m the right person for the job’, Difficult Terminology and Emotional Aspects. We may feel we lack the time, skills or experience in palliative care but there are resources available to help. Further training is needed for all HCPs and additional research is needed after the implementation of an educational package. The completion of supplementary palliative care training prior to revalidation may also be considered.

**PP.209**

**Post abdominal hysterectomy patient survey: evaluation of complaints and experience at community level**

Elahi, SM; Wali, I; Madahar, I

Heartland Hospital Birmingham, Birmingham, UK

**Objective:** The purpose of this study was to access post-hysterectomy problems and experience at community level.

**Background:** There is no standard road map to recovery. Due to current strains on NHS for resources, a short hospital stay after a major surgery will provide significant cost saving. This will reduce healthcare burden without compromising patient safety.

**Methods:** This was a retrospective study of 30 cases, which underwent abdominal hysterectomy surgery for different indications in the department of Obstetrics and Gynaecology at Heartland Hospital Birmingham.

To investigate this, a total 30 records were obtained over a period of 2 months from July 2012 to August 2012 in terms of demographic information, length of hospital stay, presenting complaints, any treatments at community level and planned follow-up. A questionnaire was designed. Data were collected 8 months post procedure by phone call interviews to assess a range of complaints and their experiences.

**Results:** All total of 30 patients were contacted. Information was obtained from 27 patients and three patients were inaccessible. About 56% patients experienced short term pain lasting 2 weeks which required simple analgesia. One patient experienced long standing pain for which she is under pain control team. About 22% patients presented with bladder symptoms mostly with urge incontinence. However 19% presented with urinary tract infection needing antibiotic cover.

Most patients had satisfactory wound healing, however four (15%) complained of wound discharge and among them one needed district nurse involvement. About 32% patients were followed-up at the hospital however satisfaction rate was the same for those seen by GP. Overall patient satisfaction rate was 81%.

**Conclusions:** This survey demonstrated that patients with major surgery can be managed appropriately at community level after early discharge with high patient’s satisfaction.

However this will require would require good communication with primary healthcare system, defined protocols for patient selection and robust round-the-clock medical telephone backup if necessary.

[Correction added 30 December, after online publication. PP.209 abstract was inserted in the Poster Presentations section.]