Conclusions The significant incidence of fetal macrosomia in this cohort of women suggests untreated diabetes and potential benefits in adopting IADSPG criteria.

PM.59 AUDIT OF THE MANAGEMENT OF PREGNANT WOMEN WITH EPILEPSY (2011)

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The confidential enquiry into maternal deaths has highlighted 14 deaths in UK due to epilepsy (0.61 per 100,000 maternities). NICE and SIGN have set out guidelines for the management of pregnant women with epilepsy.

We conducted an audit of epilepsy management during pregnancy, comparing the results with national guidance and to a previously conducted audit in the region in 2003.

All pregnant women with epilepsy booked at our medical obstetric clinic were identified, case notes obtained, and data analysed as per our objectives.

Thirty two cases were identified and 30 case notes were obtained. Only 23% had preconception counselling and 60% had pre-pregnancy folic acid. Of these, 77% had 5 mg. Specialist referral was made in 83% of cases. 82% were on antiepileptic drugs (AEDs). Of these, 56% were on monotherapy. 26% received enzyme inducing drugs and of these only 4 (50%) received 20 mg vitamin K at 36 weeks. None of them received double dose steroids. 53% experienced antenatal seizures and in 66%, seizure frequency was reduced or unchanged. Only 20% received anaesthetic review for reasons other than epilepsy. 50% were induced and 66% achieved a vaginal delivery. One fetus was found to have talipes at the anomaly scan. Postnatally only 32% received advice on infant care with epilepsy.

We propose an antenatal proforma for care of pregnant epileptic women. We also propose a postnatal information leaflet advising women on, breast feeding, infant care, importance of AEDs in the postnatal period, contraception and prepregnancy folic acid in subsequent pregnancies.

PM.60 EFFECTS OF LMWH PROPHYLAXIS ON THE MORBIDLY OBESE PREGNANT WOMEN

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Background LMWH prophylaxis has been recommended for morbidly obese pregnant women (>40 kg/m^2). However, no data exists on the anticoagulant effects of LMWH in this group.
Aim We investigated different dosing regimens; fixed dose versus weight adjusted dose on the anticoagulant effects of the LMWH, tinzaparin used for thromboprophylaxis in obese pregnant women.
Method Twenty morbidly obese pregnant women were started on a fixed dose of tinzaparin (4,500 iu/day)at 30 weeks gestation and then changed to a weight adjusted dose (75 iu/kg/day) for the remainder of their pregnancy. Four hour post dose venous blood were taken after each initial dose and repeated every 2 weeks until delivery. Twenty normal weight women at the same gestation were used as controls.
Result Prior to LMWH prophylaxis, TFPI levels in the obese group at 30 weeks were significantly lower ($p < 0.001$) and ETP and peak thrombin levels in obese group were significantly higher compared with controls ($P < 0.0001$; $P < 0.001$).

Within the obese group, there was no significant difference between ETP levels before and after fixed LMWH dose. However, ETP levels were significantly lower post weight-adjusted dose (75 iu/kg tinzaparin) compared with post fixed dose. There was a significant effect of LMWH on TFPI levels, ($p < 0.0001$). ETP correlated positively with total body weight at fixed dose ($r = 0.578$) ($p < 0.05$).
Conclusion Morbidly obese pregnant women have increased thrombin generation and reduced natural anticoagulant in third trimester. The prothrombotic state in pregnant morbidly obese women was substantially attenuated by weight adjusted but not at fixed LMWH doses.

PM.61 THE USE OF QUANTITATIVE FETAL FIBRONECTIN TO PREDICT OBSTETRIC OUTCOME: A COMPARISON OF A NEW AND ESTABLISHED QUANTITATIVE BEDSIDE ANALYSER IN ASYMPTOMATIC HIGH-RISK WOMEN

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Background Preterm birth (PTB) remains a significant cause of neonatal morbidity and mortality. The most accurate predictors of PTB are ultrasound determined cervical length (CL) and fetal fibronectin (fFN)[1]. Quantitative fFN can be used to further outline risk in symptomatic women[2]. New devices are appearing on the market.
Objectives To compare the capacity of two different quantitative fetal fibronectin (fFN) systems to predict cervical shortening in asymptomatic women at high-risk of PTB.
Methods Women underwent CL measurement and fFN testing between 20^{+0} and 24^{+6} week of gestation in the Preterm Surveillance Clinic at St. Thomas' Hospital (August to November 2012). Fetal fibronectin samples were run using a bedside immunoassay system (10Q system, Hologic, Marlborough) and bedside chemiluminescence system (DryLab, Audit Diagnostics, Ireland).
Results 130 fFN tests were taken from 89 women. Comparison of all test results showed considerable difference between methods (R^2 0.22). A short cervix (<25 mm) was found in 14 women. The 10Q system was able to significantly detect cervical shortening (Area under the curve 0.69, 95% CI 0.57–0.82, $p = 0.002$), however DryLab system could not (AUC 0.52, 95% CI 0.35–0.71, $p = 0.12$). Hologic 10Q had a better positive predictive value than DryLab (29% vs. 22% respectively), but similar negative predictive values (88% vs 87% respectively). Secondary outcomes such as gestational age at delivery will be presented.
Conclusion Quantitative fFN is associated with cervical shortening and therefore risk of imminent preterm birth in asymptomatic women. Not all commercial devices are accurate.

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PM.62 FIVE YEAR RETROSPECTIVE REVIEW OF ANTENATAL LAMIVUDINE (LAM) TO REDUCE THE PERINATAL TRANSMISSION OF HEPATITIS B (HBV)

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Objectives To review the safety and efficacy of LAM in reducing the perinatal transmission of HBV.
Methods Medical charts of HBV positive women who received treatment with LAM and who booked for antenatal care between 2007 and 2012 were retrospectively reviewed.
Results Between 2007 – 2012, 34 pregnant HBV positive women received treatment with LAM during the third trimester. All were HbeAg positive, and 6/34 were anti-HbCore IgM positive, indicative of acute infection. Where tested, the predominant genotypes were B and C, occurring in 16/32 and 11/32 respectively. Genotype D was noted in 4/32 women. One woman was co-infected with Hepatitis C.

Mean viral load (VL) pre-treatment was >1 × 108 IU/ml, mean VL closest to delivery was 6.5 × 106 IU/ml ($P < 0.001$). No resistance to LAM was identified in the 70% who were tested post treatment.

Median delivery gestation was 39 weeks (range 37–41 weeks); 17/33 had a normal vaginal delivery, 5/33 had an instrumental delivery, 9/33 had a C section, 2 delivered elsewhere and one patient is still pregnant. Median birth weight was 3.49 kg (range 2.33–4.72 kg). All babies received HBV IgG and the first dose of vaccine within the first 24 hours of life. Of 33 live born infants, 17 were not infected, 8 left the country prior to the 8-month serology test, 6 have serology pending (not yet 8 months) and 2 were lost to follow up.
Conclusions Treatment with LAM is a safe and effective. No vertical transmission of HBV was noted, and no adverse maternal or fetal effects were reported.

PM.63 INTERNATIONAL VOLUNTEERING TO PROMOTE MATERNAL AND NEWBORN HEALTH: OPTIMISING IMPACT

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This paper presents the results of an interim evaluation of an initiative funded by the Tropical Health Education Trust (THET) and hosted by the Liverpool-Mulago-Partnership. Internationalisation is becoming an essential dimension of clinical careers resulting in a growth in professional volunteering in developing countries. The Ugandan Maternal and Newborn Hub, formed in 2011 seeks to reduce maternal and newborn mortality in Uganda through improved partnership.

In 2012 the HUB was awarded funding through THET's Health Partnership Scheme to set up the 'Sustainable Volunteering Project' (SVP). The SVP is responsible for the recruitment, deployment and evaluation of professional volunteers across the HUB. It aims to:

- Reduce Maternal and Newborn Mortality in Uganda through the placement of professional volunteers.
- Develop, promote and evaluate a model for sustainable and effective professional voluntarism

Working in close partnership with the Association of Anaesthetists of Great Britain and Ireland, the Royal College of Obstetricians and Gynaecologists, the Royal College of Paediatrics and Child Health and the Royal College of Midwives the SVP aims to provide a more supportive and effective environment for clinical volunteering.

The paper presents results of the interim evaluation outlining key areas of intervention including the reduction of caesarean-section rates through instrumental (vacuum) delivery; the promotion of Early Warning Scoring Systems; Infection Control and High Dependency Maternal/Neo-natal Care. It assesses the role of clinical volunteers in promoting sustainable change in development settings and in terms of the acquisition of clinical skills and experience for early career clinicians returning to the UK.

PM.64 PREGNANCY OUTCOMES IN WOMEN WITH SICKLE CELL DISEASE AT A LONDON HOSPITAL (2006–2012)

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Introduction SCD is associated with both maternal and fetal complications including pre-eclampsia, growth restriction and stillbirth together with an increased frequency of acute painful crises.
Method This was a 6-year retrospective audit of 56 pregnant women with SCD: 22 HbSS & HbS-beta(0); 27 HbSC; 7 HbS-beta(+).
Setting The women were all managed by the same multidisciplinary team, which included haematolgists, obstetricians and a specialist SCD midwife.
Results There were few obstetric antepartum complications (2% pre-eclampsia, 2% antepartum haemorrhage). However, 35% were admitted with acute painful crises. 7 women underwent regular exchange transfusions for severe pre-existing maternal disease and significant obstetric history. There were no maternal deaths in this cohort.

9% of women with SCD were delivered before 34 weeks. 64% of women were delivered by caesarean section (61% emergency, majority of which were for failure to progress).

Out of the 56 pregnancies, there were 54 live births, 2 stillbirths (one unexplained at 40 weeks, one with severe growth restriction at 27 weeks), and 1 neonatal death (day 8 secondary to disseminated herpes simplex).
Discussion The Green-top Guideline (No.61, 2011) suggests all those with SCD should be on low dose aspirin from 12 weeks, have appropriate management of painful crisis and undergo extra scanning with uterine artery dopplers.

Most of these pregnancies predate this RCOG guideline. It would be interesting to note if further improvements in outcome will follow recent recommendations. SCD is the commonest and fastest growing single gene genetic disorder in the UK and these women benefit from specialised multidisciplinary care.

PM.65 TO EVALUATE THE EFFECTS OF ANTI-PSYCHOTIC MEDICATIONS TAKEN IN PREGNANCY, COMPARED TO ANTI-DEPRESSANTS AND A CONTROL GROUP WHO HAD MENTAL ILLNESS, BUT WERE NOT ON MEDICATION. THE SETTING WAS A SPECIALIST ANTENATAL LIAISON MENTAL HEALTH CLINIC

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Objective Perinatal mental illness presents challenges to obstetricians. Mental illness of all severities can have in impact on maternal and infant outcomes. There is an increasing evidence for the use of anti-depressants in pregnancy, but a paucity of data for women using anti-psychotics.
Design A retrospective casenote review of all cases attending an antenatal mental health clinic between April 2011–12.
Setting Background fetal growth restriction rate 13%
Results 282 women were referred to the clinic. 215 had depressive disorders, with 139 (76.2%) on psychotropic medication. 132 (87.4%) of the women were on antidepressants and 18 (12%) on anti-psychotics. 28 (20%) babies were below the 10th customised centile & 19 (13%) were diagnosed with a congenital abnormality at birth. 72 had anxiety disorders with 32 (63%) on antidepressants and, 10 (20%) on atypical anti-psychotics, 5 (10%) had babies diagnosed with anomalies at delivery. 14 (29%) babies in this group were below the 10th. 5 women with psychotic disorders were all on anti-depressants and anti-psychotics. 2 (40%) of the babies were below