scan if indicated, induction of labour (IOL) based on consultant decision) with intensive management (ultrasound scan, maternal serum hPL, IOL if either result was abnormal). Anxiety was assessed by state-trait anxiety index (STAI) before and after investigations for RFM. Rates of protocol compliance and IOL for RFM were calculated.

Results 137 women were approached, 120 (88%) participated. 2 women in the standard group did not complete the study. 20% of participants had a poor perinatal outcome. All women in the intensive group had ultrasound assessment of fetal size and liquor volume vs. 96.7% in the standard group. Although there was no difference in IOL rates overall, 50% of the intensive group had IOL for abnormal scan or low hPL after RFM vs. 25% of controls who had IOL for RFM ($p < 0.01$). STAI reduced for all women after investigations but this reduction was greater in the standard group ($p = 0.02$).

Conclusion Women are willing to participate in an RCT of management of RFM with a low rate of attrition. Investigations decrease maternal anxiety. Participants randomised to the intensive group were more likely to have IOL for RFM.

PP.36 THE IMPACT OF UNEXPLAINED RECURRENT MISCARRIAGE ON SUBSEQUENT PREGNANCY OUTCOMES

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Aim We sought to determine subsequent pregnancy outcomes in a cohort of women with a history of unexplained recurrent miscarriage (RM) as compared to healthy pregnancy controls.

Study design This was a prospective cohort study of women attending a dedicated RM clinic in the Rotunda Hospital in 2011. Inclusion criteria included women with a history of three consecutive first trimester losses that were unexplained in the past, no medical intervention and singleton pregnancies only. The inclusion criteria for the healthy controls included no history of stillbirth, intrauterine growth restriction, preeclampsia or preterm labour.

Results Of the 42 women with RM recruited to the study nine (23%) experienced further first trimester miscarriages, one molar and one ectopic pregnancy. The remaining RM cohort with ongoing pregnancies (n = 31) were compared to healthy controls (n = 31) matched for age and BMI. The only statistical difference between the two groups was the earlier mean gestational delivery of the RM group (38 + 2 vs 39 + 4 weeks, $p = 0.004$) attributed to earlier induction due to their past history. Otherwise there was no significant difference with respect to pregnancy complications, delivery and neonatal outcomes. All of RM patients achieved successful term deliveries with a 74% vaginal delivery rate and a mean birthweight of 3.23 kg.

Conclusion This study re-iterates the reassuring prognosis for women with a history of unexplained RM who undergo supportive care at a dedicated clinic. The majority delivered appropriately grown fetuses at term which was comparable to healthy controls.

PP.37 THE ANTENATAL DETECTION OF SERIOUS CARDIAC ANOMALIES – EVALUATING A DISPARATE GROUP AGAINST A TARGET

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Background In 2010, the NHS Fetal Anomaly Screening Program (FASP) issued national targets for the antenatal detection rates (ADR) of "serious cardiac anomaly" at the 18^{+0}–20^{+6} week Fetal Anomaly Scan. There is no standardised definition for reporting for this heterogeneous group of anomalies. Here we evaluate the EUROCAT "serious cardiac group" against the FASP target of 50% antenatal detection, using data for 2010–2011 from the East Midlands and South Yorkshire Congenital Anomaly Register (EMSYCAR).

Methods Births between 01/01/2010 and 31/12/2011 reported to EMSYCAR as affected by one or more of the relevant cardiac ICD-10 codes were included in this analysis; cases associated with chromosomal anomalies were excluded. Birth prevalence and detection rates with 95% confidence intervals were calculated for each anomaly and compared to the FASP target.

Results The regional birth prevalence rate for the serious cardiac group was calculated; this varied between anomaly sub-groups from 0.59 to 4.42 per 10,000 births. The ADR failed to reach the FASP target: (44.85%, *39.14%–50.66%*) though it was not significantly lower. Overall, 7 sub-groups reached the FASP target; 2 groups achieving statistical significance.

Conclusion The EUROCAT serious cardiac group of anomalies show wide ranging birth prevalence and ADR between the subgroups, highlighting problems with standardised reporting. Given problems defining the group and the requirement for producing annual FASP target data at hospital level using small case numbers, there is major statistical uncertainty, leading to problems interpreting results. Standardisation of definitions and reporting will enhance the value of FASP targets for units.

PP.38 AN AUDIT INTO THE OUTCOMES OF PREGNANCY IN PATIENTS WITH THROMBOPHILIA

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In pregnancy, patients with thrombophilia are known to have a poorer obstetric outcome. However the outcomes of pregnancy are not well defined in the literature. We did a retrospective audit looking at a cohort of women with thrombophilia. Medical records were reviewed for pregnancy events pre and post diagnosis of thrombophilia, the management and pregnancy outcomes.

Twenty-nine women had a total of 125 pregnancies, 83 pre-diagnosis and 42 with treatment. They had a mean age of 34 years with mean age at diagnosis of 29 years old. Women treated after a diagnosis of thrombophilia had significantly less miscarriages in the 1st trimester and 2nd trimester (68% vs 21%, Fisher's exact test $P = <0.0001$) than those pre-diagnosis and treatment.

The current treated pregnancy outcomes showed a mean birth weight of the babies born at term (37–40 weeks) was 3.2 kg (Range 2.43–3.95 kg). 38% had spontaneous onset of labour, whilst 55% were induced at 38–39 weeks gestation. The remaining 7% included a miscarriage and stillbirth. Only 63% achieved a vaginal delivery compared to 91.6% in the pre-diagnosis pregnancies, which was statistically significant. ($P = <0.02$ Fishers exact test). This is due to the higher number of inductions at 38–39 weeks gestation in these women.

Therefore the recommended treatment for thrombophilia in pregnancy has significant benefit to the outcome of live birth. However due to induction of labour prior to the due date to reduce the risk of stillbirth women are less likely to achieve a vaginal birth.

PP.39 TEENAGE PREGNANCY – A DECADE SINCE THE UK DEPARTMENT OF HEALTH TEENAGE PREGNANCY STRATEGY PLAN: A REVIEW IN A UNIVERSITY TEACHING HOSPITAL IN LONDON, UK

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Background (1) In 1999, the UK DOH Teenage Pregnancy Strategy Plan pledged to reduce the pregnancy rate by 50% in < 18 yrs old by 2010. (2) In 2009, the UK teenage pregnancy rate was 38.3 per 1,000 compared to 54.3 per 1,000 in Barking & Dagenham (high-risk area served by the hospital)
Aim This retrospective cohort study reviewed all viable teenage pregnancies from Jan 1, 2010–Dec 31, 2010.
Method Data were obtained from the Labour Ward, Birth Notification and Operating Theatre Registries.
Results There were 257 teenagers with 260 viable babies > 28 weeks gestation. This included primigravida (230/257) = 89.49% and multiparous (27/257) = 10.51%. The ages ranges from 14–19 yrs (mean = 18.29 yrs). Ten (10/257) 3.89% were < 16 yrs old. There were Instrumental deliveries (29/257) = 11.28%, Caesarean section (36/257) = 14.01%, and Vaginal deliveries (192/257) = 74.71%. The mean fetal birth weights were – Instrumental 3.389 kg +/- SD 0.468 kg, Caesarean 3.106 kg +/- SD 0.752 kg; and Vaginal Delivery 3.117 kg +/- SD 0.501 kg.
Maternal Morbidity Third degree tear (n = 3), Pre-eclampsia (n = 12) & PPH > 1 litre (n = 4)
Fetal Morbidity SCBU admission (n = 7), Stillbirth (n = 3) & Shoulder dystocia (n = 2)
Discussion During 1999–2009 the teenage pregnancy rate fell by only 13.3% in spite of the DOH Teenage Pregnancy Strategy Plan.

1. In this cohort the caesarean rate was lower 14.01% vs 24%, the vaginal delivery higher 74.71% vs 65% but the instrumental was similar 11.28% vs 10% compared to the UK average (Caesarean Section Sentinel Audit).
2. There was a dedicated Teenage Pregnancy Midwifery Team providing continuity of care
3. There were 10.51% (27/257) multiparous teenagers thus contraceptive advice remains crucial, as UK has the highest teenage pregnancy rate in Europe

PP.40 THE POTENTIAL OF DIGITAL MEDIA TO IMPROVE FETAL AND MATERNAL OUTCOMES

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Background Despite both Ireland and the United Kingdom providing free maternity care to all women, adverse fetal and maternal outcomes remain closely linked to social disadvantage and lack of support during pregnancy. A European survey found 42.4% of respondents had limited functional health literacy, closely liked to economic deprivation. Written information remains the main medium of communication for maternity services. It is likely that many of these messages are not adequately communicated to those most at risk.
Objectives This study examined the use of digital media by pregnant women to access healthcare information for pregnancy.
Methods A survey was distributed to all antenatal patients attending clinics at a large Dublin maternity hospital.
Results Of the 218 women surveyed, 81% attended public clinics and 19% attended private clinics, 60% lived in Dublin and 40% were from surrounding counties, 18% were unemployed. Overall 94% used the internet to access information about pregnancy; 100% of unemployed women use the internet to access healthcare information and 75% of women have a smartphone. Newspapers were read by only 29% of women. All women wanted some form of online/digital support during their pregnancy, including weekly text messages about pregnancy stage-specific issues (cited by 45%), a maternity smartphone App (44%) and a website for feedback regarding their care (42%).
Conclusion Digital media use is widespread across all socioeconomic groups. Healthcare communication in pregnancy should focus on digital communication channels.

PP.41 MANAGEMENT OF OBESITY IN PREGNANCY IN THE WEST OF SCOTLAND

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In 2012, a prospective 3-month audit of management of obesity in pregnancy was undertaken in Glasgow and Clyde maternity hospitals comparing practise to CMACE/RCOG guideline.[1] 214 women were identified out of 3,834 deliveries: 138 (64%) had a booking body mass index (BMI) of 35–39 whilst 76 (36%) had a BMI ≥ 40. Out of total deliveries, 3.5% had a BMI of 35–39 and 2.0% had a BMI ≥40.

43 (31%) women took folic acid preconception which increased to 125 (91%) women in first trimester. However, only 2 women took 5 mg preconception and 7 took this during first trimester. Only 4 women had documented evidence of vitamin D supplementation. Hand-held records were available in 197 cases and 193 (98%) women had booking BMI recorded. Anaesthetic review occurred in 68 (89%) women with BMI ≥ 40.

Antenatal thromboprophylaxis was indicated in 43 women, but 11 women received it. Postnatally, all women with BMI ≥ 40 should have thromboprophylaxis, however 50 (66%) received this, out of which 14 women received appropriate dose for weight. Though only 21 (10%) women had glucose tolerance test in BMI 35–39 group, this increased to 44 (58%) women in BMI ≥ 40 group.

44 (58%) women with BMI ≥ 40 had obstetric staff of specialty trainee year ≥6 in attendance at delivery. There is good compliance of guideline with 195 (91%) women having documented active management of third stage and only 1 woman induced for BMI. We conclude that some CMACE/RCOG recommendations have been implemented, though there is much scope for improvement.

REFERENCE

1. Centre for Maternal and Child Enquires/Royal College of Obstetricians and Gynaecologists Joint Guideline. Management of women with obesity in pregnancy. March 2010.

PP.42 INVESTIGATION OF NEONATAL ENCEPHALOPATHY: THE LOST PLACENTAL 'BLACK BOX'

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Background After an aeroplane crash, recovery of the 'black box' is a high priority for investigators; analysis of recorded parameters frequently identifies cause or contributing factors. The placenta likewise provides an invaluable record of the pre-'crash' period in hypoxic ischaemic encephalopathy (HIE); its examination often identifies significant factors such as inflammation or vasculopathy.
Objective To determine the frequency of histopathologic placental examination and chorioamnionitis in a high-risk population of encephalopathic newborns.
Methods We studied neonates ≥36 weeks' gestation admitted with HIE to three tertiary-level UK centres between 01/07/06 and 30/06/11. We assessed if placental histopathological examination was carried out and if there was evidence of chorioamnionitis and/or funisitis.
Results 305 infants were admitted with HIE in the 5-year study period. Placental data were unavailable for 140 outborn infants. Only 50/165 (30%) inborn babies had placentas submitted to pathology. Histopathological examination confirmed chorioamnionitis and/or funisitis in 16/50 (32%) cases.