PM.12 THE MANAGEMENT OF PREGNANT WOMEN ATTENDING TRIAGE WITH SUSPECTED URINARY TRACT INFECTION (UTI)

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Aims This audit and re-audit was undertaken to ascertain whether women presenting to Triage, with symptoms suggestive of possible UTI, are being appropriately assessed/treated.
Methods The Admission Proforma of all women attending Triage with lower abdominal pain with no clear cause, but where UTI was considered, was reviewed against agreed standards. Data was collected prospectively for a period of 2 and 3 weeks respectively. In each audit notes from 50 women were reviewed.
Results In the initial audit 86% (43/50) had urine dipped but only 5% (2/43) of these showed nitrites (1 had confirmed UTI); 32% (16/50) were treated with antibiotics, 75% (12/16) of these had MSSU sent, but only 2 had confirmed UTI. In the re-audit 42% (21/50) of patients had an MSSU - 75% (6/8) of those prescribed antibiotics. Urine dipstick was performed in 94% (48/50) of all cases - 88% (7/8) of those treated. No nitrites were identified or UTI confirmed by culture.
Conclusions Pregnancy increases the risk for UTIs and failure to treat has serious maternal/neonatal consequences, not least preterm delivery. Nevertheless a diagnosis of UTI is too frequently made; often without strong evidence, and women are being overtreated. Antibiotic resistance is an increasing problem; unnecessary prescriptions must be avoided. All women presenting with abdominal pain should have their urine dipped. Audit confirms that leucocytes and/or proteinuria are not indicative of infection; even nitrites may not be diagnostic. If positive for nitrites, MSSU must be sent and urgent microscopy could be considered, ahead of prescribing antibiotics.

PM.13 OFFSPRING BIRTH WEIGHT AND MATERNAL FASTING LIPIDS IN WOMEN SCREENED FOR GESTATIONAL DIABETES MELLITUS

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Objective Maternal lipid metabolism is altered during pregnancy but little is known about the influence of these alterations on intrauterine fetal development. To examine the relationship between offspring birth weight and both fasting cholesterol and triglycerides in women screened selectively for Gestational Diabetes Mellitus (GDM).
Methods Prospective observational study in a large university maternity hospital. Women were recruited when they were screened selectively for GDM with a diagnostic 75 g Oral Glucose Tolerance Test (OGTT). At the time the fasting glucose was obtained an additional sample was taken for a lipid profile.
Results Of the 189 women recruited, the mean age was 32 years, 35.4% (n = 67) were primigravidas, 44.1% (n = 82) were obese and 11.6% (n = 22) had an abnormal OGTT. On univariate analysis, increased birth weight was correlated positively with multiparity, increased first trimester Body Mass Index (BMI), GDM and hypertriglyceridaemia but not cholesterol. On multivariate analysis, increased birth weight correlated positively only with hypertriglyceridaemia.
Conclusions This study provides further evidence that maternal hypertriglyceridaemia may be important in programming intrauterine fetal development and raises questions about whether women should be screened selectively for dyslipidaemia before, during and after pregnancy.

PM.14 HOW REASSURING IS A NORMALLY SITED PLACENTA AT THE 18 – 20+6 WEEK ANOMALY SCAN AT EXCLUDING PLACENTA PRAEVIA?

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If the placenta abuts or overlies the os at the 18 – 20^{+6} week anomaly scan, management to identify those women who end up with placenta praevia (PP) is well established[1]. We could find no evidence of the reverse side of the issue: whether a normal placental site at the anomaly scan could be relied upon to exclude a diagnosis of PP later in pregnancy. Amongst clinicians in our region, there was widely differing opinion.

Between April 2003 and February 2012 there were approximately 32500 deliveries in NHS Fife[2]. 121 (0.37%) women were identified who had been delivered by caesarean section where the indication was PP. The placental site from the anomaly scan was identified using the local ultrasound reporting system. Caldicott approval was granted.

There were 59 (49%) emergency and 62 (51%) elective caesarean sections. 111 (92%) had an anomaly scan between 18 and 20^{+6} weeks.

Abstract PM.14 Table

Placental Site at 18 – 20+6	n		Later scan indicated[1]
Not Low	39	35%	No
Low but clear of os	7	6%	No
Abutting os	8	7%	Yes
Overlying os	57	51%	Yes
Totals	111		

In 46/111 women (41%, 95% CI 32–51%) the anomaly scan did not suggest the possibility of a problem. Hence, 3 – 5 out of every 10 women with a normally sited placenta at their anomaly scan may ultimately develop PP. We believe that women who present later in pregnancy should have a further scan to exclude PP even if the placenta was not significantly low at the anomaly scan.

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PM.15 NHS LOTHIAN GUIDELINES- ARE THEY BEING ADHERED TO FOR THE MANAGEMENT OF POSTPARTUM HAEMORRHAGE (>1.5 L), PRE-ECLAMPSIA AND SEPSIS?

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Introduction Postpartum haemorrhage (PPH), pre-eclampsia and sepsis are the most common indications for receiving obstetrics high-dependency care in the Royal Infirmary of Edinburgh (RIE). This study therefore aimed to evaluate adherence to the NHS Lothian guidelines for the management of suspected severe sepsis (SSS), severe pre-eclampsia (SPE) and PPH > 1.5 L. Immediate resuscitation, ordering of investigations and treatment administration were evaluated.
Method A retrospective audit of paper and electronic patient records was performed on patients who received high dependency care for SSS, SPE and PPH > 1.5 L in the RIE.
Results 16 patients had SSS. All patients had IV access, their 'ABC' (Airway, Breathing, Circulation) checked, oxygen saturations,

pulse, BP and baseline bloods (FBC, U&Es, Clotting, ABGs, G&S) monitored. Checking of capillary refill time (13.8%), administration of high-flow oxygen (12.5%), blood cultures (87.5%), electrocardiograms (37.5%) and fluid balance monitoring (56.3%-81.3%) need to be performed more frequently. 16 patients had SPE. Baseline bloods (FBC, U&Es, urate, LFTs & G&S), administration of ranitidine and catheterisation were performed in all patients. Of concern are: checking of clotting screen (87.5%), blood pressure monitoring after administration of antihypertensives (33.3%-46.2%) and observations after Magnesium sulphate prescribing (25%). 37 patients had PPH > 1.5 L. Measures with 100% compliance were: the 'ABC' cheque, administering IV fluids and measuring FBC. Weighing blood loss, establishing intravenous access and administration of high-flow oxygen and warmed fluids (32.4%-54%) need to be performed more often.

Conclusion Many aspects of the guidelines are adhered to, but areas of concern must be improved in order to optimise patient care and outcome.

PM.16 ULTRASOUND COLOUR-FLOW DOPPLER IN INITIAL ASSESSMENT OF MORBIDLY ADHERENT PLACENTA FOLLOWED BY SELECTIVE MR IMAGING: A CASE SERIES

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Morbidly adherent placenta (MAP) is the abnormal attachment of the placenta to the uterine wall in which trophoblastic cells invade the uterine tissues. MAP is rare, affecting 1 in 2500 pregnancies[1], however it is associated with high feto-maternal morbidity and mortality[2]. Previous caesarean section is a major risk factor for development of MAP[3], and complicates 24% of cases of placenta praevia after one prior caesarean section[4]. With the current trend of increasing caesarean section rates[5], MAP will pose significant obstetric problems in the future.

Antenatal diagnosis of MAP has been shown to reduce maternal morbidity[6]. Recent guidance from the National Institute for Clinical Excellence suggests that in cases where there is suspicion of MAP, colour-flow Doppler ultrasound should be used as a first line diagnostic tool[7]. Presence of irregular lacunae within the placental architecture and loss of the clear space in the retroplacental plane are considered to be useful diagnostic criteria in ultrasound imaging of MAP[8]. Where such ultrasound changes are found, magnetic resonance imaging (MRI) can then be considered to confirm diagnosis and evaluate the extent of invasion which would aid management planning[6].

We present a case series of 6 patients presenting to York Teaching Hospital in whom MAP was queried on the basis of previous caesarean section, placental localisation scan or clinical presentation. We discuss the role of colour-flow Doppler ultrasound in the initial assessment of suspected MAP followed by selective use of MRI.

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PM.17 IMPACT OF MATERNAL OBESITY ON ACCURACY OF SONOGRAPHIC FETAL WEIGHT ESTIMATION IN IUGR

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Objective The objective of this analysis, as part of the multicentre prospective PORTO Trial, was to determine whether increasing maternal BMI decreases the accuracy of sonographic fetal weight estimation in IUGR pregnancies.

Study design The PORTO Trial recruited 1,118 consecutive ultrasound-dated singleton IUGR pregnancies, defined as EFW < 10th centile. Maternal BMI was recorded at booking and divided into 4 subcategories. Accuracy of fetal weight assessment was defined as difference between EFW within 2 weeks of delivery and actual birthweight.

Results Of the 1,076 recruited patients with complete records, 693 (64%) were of normal weight (BMI < 25), 258 (24%) were overweight (BMI 25–30), 93 (9%) were obese class I (BMI 30–35) and 32 (3%) were obese class II (BMI 35–40) (Table 1). Overall, fetal weight estimation prior to delivery was within 6% of respective birthweight. EFW was not influenced by increasing maternal BMI and EFW accuracy was only marginally better in normal weight mothers. Greater BMI was associated with earlier gestational age at delivery.

Conclusion These data show that ultrasound is reliable in the assessment of fetal weight in IUGR in the presence of increased maternal BMI.

Abstract PM.17 Table 1 Outcomes for BMI Categories.

	Normal weight	Overweight	Obese Class I	Obese Class II	p-value
Mean GA at delivery (weeks)	38.1	37.5	37.2	35.5	<0.0001
Birthweight (g)	2543	2473	2414	1989	0.0055
EFW (<2 weeks of delivery)	2426	2307	2317	1984	0.0011
Median % difference	6.3%	6.4%	5.9%	6.6%	0.9828

Note: P-value compares BMI < 25 to BMI > 25

PM.18 MATERNAL RESTING PERIPHERAL BLOOD FLOW AND TISSUE OXYGENATION IN PREGNANCIES COMPLICATED WITH PRE-ECLAMPSIA AND IUGR

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Background Pre-eclampsia is characterised by hypertension and proteinuria and associated with systemic hypoperfusion of multiple maternal organs. Intrauterine growth restriction (IUGR) is a recognised complication of pre-eclampsia and the two conditions