

**Conclusion** Assessment of SpA remodelling may not require quantitative assessment since semi-quantitative scoring correlates well with quantified VSMC in partially remodelled SpA. This scoring technique provides an approach to assessment of uterine SpA remodelling in pregnancy pathology.

# PM.27 GESTATIONAL DIABETES: IS IT SAFE NOT TO INDUCE?

doi:10.1136/archdischild-2013-303966.110

K O'Shea, A Makris, S Hamilton, S Pathak. *Hinchingbrooke Health Care NHS Trust, Huntingdon, UK*

**Background** Despite recent advances in the management of Gestational Diabetes (GDM), there is a paucity of evidence addressing the ideal timing of delivery in women who are well controlled. If recent proposed changes to diagnostic criteria were to be adopted<sup>1</sup>, the incidence of GDM would increase up to 16%. This could potentially increase induction and caesarean section rate.

**Objective** To assess the safety of not routinely inducing well controlled gestational diabetic women at 38 weeks.

**Methods** Retrospective study in a district general hospital.

**Outcomes** Incidence of fetal macrosomia, stillbirth, caesarean section, shoulder dystocia, third degree tear, postpartum haemorrhage (PPH) and admission to SCBU in this population.

**Results** In 2012, 157 women were diagnosed as GDM according to WHO/NICE criteria; 47% were treated with Metformin and 15% with Insulin. 48 women, well-controlled on diet, Metformin, and/or Insulin, were allowed to go into spontaneous labour. 12 of these women were eventually induced for post-maturity.

The incidence of macrosomia, emergency caesarean section, third-degree tear, PPH, SCBU admission was 4%, 12.5%, 4%, 4% and 4% respectively. There were no cases of shoulder dystocia or still-birth. These figures are well below the national average.

**Conclusion** Treating well-controlled gestational diabetics conservatively at term is a safe management option.

## REFERENCE

- Metzger BE, Gabbe SG, Persson B, Buchanan TA, Catalano PA, Damm P, Dyer AR, Leiva A, Hod M, Kitzmiller JL, *et al*, International association of diabetes and pregnancy study groups recommendations on the diagnosis and classification of hyperglycemia in pregnancy. *Diabetes Care* 2010;33:676–682.

# PM.28 AUDIT ON CARE AND OUTCOME OF PREGNANCY IN WOMEN WITH MORBID OBESITY

doi:10.1136/archdischild-2013-303966.111

D Kapoor, J Davison, S Rajendran. *Royal Derby Hospital, Derby, UK*

**Background** Obesity is one of the biggest challenges facing maternity services today. Women with obesity have significant higher complication rates and these can potentially be reduced with good quality clinical care.

**Objectives** To compare current practise at Royal Derby Hospital with the RCOG/CEMACE guideline on management of pregnant women with morbid obesity.

**Methods** A retrospective case-note audit of all women delivered at RDH between 01/09/2011 and 31/08/2012 with booking BMI  $\geq 40$ .

**Results** There were 6252 deliveries at RDH with 140(2.24%) patients with BMI  $\geq 40$ . We analysed 134 case notes. Glucose tolerance test was performed in 96.2% of patients at 28 weeks gestation and 55.2% had an anaesthetic review. 47.1% of women laboured spontaneously, 36.5% of labours were induced and 16.4% had elective caesarean section (CS). 67.8% of women had a normal vaginal delivery, the instrumental delivery and Emergency CS rate were 9.0% and 23.2% respectively. 89.6% of operative deliveries were either performed or supervised by ST6 and above. 96.2% had active management of 3<sup>rd</sup> stage and major postpartum haemorrhage

occurred in 8.2% of women. For term deliveries the birth weights ranged from 2620 g to 5080 g (21.6% greater than 4000 g). 47.3% had postnatal thromboprophylaxis with 81.4% on sufficient thromboprophylaxis for weight.

**Conclusion** The audit demonstrated that the guidelines were not being adhered to, particularly for anaesthetic assessment and venous thromboembolism risk. Review of our local guideline with more training for healthcare professionals involved in the care of this group of high risk patients is required to improve maternal and neonatal outcomes.

## REFERENCE

CMACE/RCOG Joint Guideline on 'Management of Women with Obesity in Pregnancy' - March 2010

# PM.29 COMPARISON OF HEPATIC PERFUSION BETWEEN PRE-ECLAMPSIA AND NORMAL PREGNANCY

doi:10.1136/archdischild-2013-303966.112

A Anbazhagan, S Ong. *Royal Jubilee Maternity Hospital, Belfast, UK*

**Objective** We wanted to provide evidence for or against the thus far, unaccepted theory that the genesis of pre-eclampsia arises from the maternal venous circulation. We also wanted to assess hepatic perfusion in pre-eclampsia using 3 dimensional ultrasound.

**Methods** We measured hepatic portal vein flow in 12 women with normal pregnancy and 11 women with pre-eclampsia using standard Doppler ultrasound. We evaluated the three dimensional (3D) indices of hepatic perfusion: flow index (FI), vascular index (VI) and vascularisation flow index (VFI) which are believed to reflect vascularity and flow intensity. Because of small numbers, a non-parametric test was used to test differences between groups.

**Results** Hepatic portal vein flow was not different between women with normal pregnancy compared to women with pre-eclampsia [228.1 (215.5–270.6) vs. 283.0 (145.9–344.6);  $p = 0.90$ ]. The 3D indices of hepatic perfusion were as follows [FI; 36.3(30.7–42.5) vs. 39.7 (27.7–44.2),  $p = 1.00$ ; VI; 11.7 (3.6–21.2) vs. 3.0 (0.5–7.6),  $p = 0.04$ ; VFI; 4.7 (1.2–8.3) vs. 1.2 (0.1–3.2),  $p = 0.06$  respectively].

**Conclusion** We were not able to provide evidence in support of the suggestion that the genesis of pre-eclampsia arises from the maternal venous circulation. Because of the wide variability of our data, overall we conclude that there is no difference in the 3D indices of hepatic perfusion in women with pre-eclampsia compared to normal pregnant women.

# PM.30 WITHDRAWN BY AUTHOR

# PM.31 A LITERATURE REVIEW OF INTERFERON BETA TREATMENT IN MULTIPLE SCLEROSIS PATIENTS DURING PREGNANCY – IMPLICATIONS FOR FUTURE RESEARCH

doi:10.1136/archdischild-2013-303966.113

SK Carney, Y Igzeer. *Pennine Acute Trust, Oldham, UK*

Multiple sclerosis is a neurological disease caused by discrete plaques of demyelination at sites throughout the central nervous system caused by a T-Cell mediated immune response with an unknown trigger. It has a lifetime risk of 1:1000 in the UK, and is twice as prevalent in females with the typical onset being between 20 and 40 years of age, namely the childbearing ages.

There are many disease-modifying therapies used to treat Multiple Sclerosis. However, immunomodulatory and immunosuppressive drugs used at any stage of pregnancy may affect fetus formation and/or development.