

and is one of the largest series available. These pregnancies can go undiagnosed antenatally if anomaly screening is not undertaken. While many die in-utero, postnatal survival is also possible.

PF.53 DO COMPUTERISED CARDIOGRAPH RESULTS CHANGE MANAGEMENT DURING PREGNANCY FOR WOMEN WITH DIABETES WHO HAVE A MACROSOMIC FETUS DIAGNOSED BY ULTRASOUND EXAMINATION?

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Background Pregnancy complicated by diabetes causes concern for the health of the fetus particularly when ultrasound examination indicates macrosomia. This has led clinicians (in the absence of beneficial evidence) to instigate fetal surveillance. All women with diabetes at the Bradford Women's and Newborn unit are offered twice weekly computerised cardiographs (CTG) if on ultrasound scan their fetus has an abdominal circumference >95th centile. Our aim was to investigate if this policy affected the management and outcomes for women with diabetes.

Method A retrospective three year analysis of all women with diabetes, with an USS indicating fetal macrosomia, who attended hospital for routine CTG between 2009 and 2011.

Results One hundred pregnancies were identified. 83 women had pre-existing and 17 had gestational diabetes (GDM). 26 cases had a total of 48 failed CTGs of which 38 failed only because of an absence of high variation. Of the women with pre-existing diabetes, 11 (13%) had one or more failed CTGs, of the women with GDM 15 (88%) had one or more failed CTGs. Only three women received an intervention following a failed CTG. Risk of admission to special care was unaffected by CTG results. One woman with 4 failed CTGs out of 11 suffered a stillbirth and one woman who had no failed CTGs suffered a stillbirth.

Conclusion Surveillance of fetal wellbeing in women with diabetes with a macrosomic infant using computerised CTGs does not seem to affect management of pregnancy or perinatal outcomes. Repeated CTGs do not seem to be of benefit in maternal diabetes.

PF.54 ACCURACY OF FETAL IMAGING FOR THE DETECTION OF SEVERE ABNORMALITIES IN EARLY GESTATION

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Background Women with pregnancies with suspected fetal anomalies are routinely referred to fetal medicine units for management. Some of these pregnancies end in spontaneous fetal loss or termination of pregnancy.

Objective We sought to determine the accuracy of antenatal detection of lethal fetal structural abnormalities by ultrasound following fetal loss evaluated by fetal postmortem.

Study design We retrospectively reviewed registry data of consecutive fetal autopsies, before 24 weeks gestation, performed in a regional perinatal pathology service in South Yorkshire England over a 5 year period comparing the postmortem findings to the antenatal diagnosis made in the regional fetal medicine unit which informed parental decisions. A subset of women who had antenatal care locally has been analysed.

Results There were 81 fetal postmortems of which 32% of the anomalies were diagnosed in the first trimester and 68% in the second trimester. Ninety-eight per cent were full postmortems. There was full agreement between antenatal and post-mortem findings in

86% of the cases. There was partial or major disagreement in 9% and 5% of the cases respectively. With the major disagreements, the post-mortem findings could result in modification of the postnatal counselling for recurrence and management of subsequent pregnancies.

Conclusion Antenatal ultrasound detected 86% of the fetal abnormalities for which parents opted for pregnancy termination or which led to spontaneous miscarriage. Postmortems not only provide reassurance of the antenatal diagnosis but also modify the management of future pregnancies.

PF.55 INTRAUTERINE TRANSFUSION FOR PARVOVIRUS B19 INFECTION OVER LAST DECADE

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Intrauterine transfusion (IUT) cases for Parvovirus B19 infection over 2002–2011 were reviewed. Our unit receives referrals from Scotland and Northern Ireland. Most were referred in 2008 ($n = 5$) and 2009 ($n = 7$). In other years there were <3 cases.

Thirty patients underwent 48 IUTs (mean 1.6, range 1–3). Twenty-six fetuses had middle cerebral artery Doppler peak systolic velocity values documented. All were >1.5 multiples of median prior to first IUT. At initial assessment, 25 fetuses were hydropic and 4 had ascites. Pre-IUT haematocrit value was available in 27 pregnancies: <10% in 15 and 10–19% in 5 cases, in keeping with fetal anaemia. Initial IUT was most frequently performed between 21–24 ($n = 13$) followed by 17–20 weeks gestation ($n = 9$) (range 17–32 weeks).

Intrauterine or neonatal death occurred in 9 hydropic fetuses that had bradycardia, thrombocytopenia, difficult procedure or severe anaemia. No reasons were identified in 2 cases. However, these did not have pre-transfusion haematocrit values. Seven procedures had other complications e.g. cord haematoma, technically difficult, bradycardia and spontaneous rupture of membranes. This pregnancy was conservatively managed with a live birth at 36 weeks gestation.

Live births occurred in 14 pregnancies. Seven women were lost to follow-up. Improved capture of outcome data is required. Short term outcomes were available in 8 neonates: 6 required no treatment, 1 had phototherapy and 1 had a neonatal death. We conclude that poor outcomes following IUT can be predicted at the time of procedure and that IUT can rescue a fetus destined for intrauterine loss to a healthy outcome.

PF.56 CARDIAC RHABDOMYOMAS IN FETAL LIFE AND BEYOND: A SINGLE CENTRE 15-YEAR EXPERIENCE

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Aim This study describes the immediate complications and outcome of children with antenatally-diagnosed cardiac rhabdomyomas, arising as a consequence of the tuberous sclerosis complex (TSC). This group is compared with those diagnosed after birth.

Method The paediatric cardiology database was interrogated to identify children with cardiac rhabdomyomas: twenty-one cases were analysed, with nine diagnosed antenatally and twelve after birth.

Results Cardiac complications were identified in ¾ of the antenatal group (7 out of 9), compared with a third of the postnatal group ($p = 0.08$). The commonest antenatal abnormality identified was an outflow tract obstruction, which affected six fetuses. Two significant cases included an intrauterine death at 36 weeks gestation and an induction of labour at 38 weeks, due to a haemodynamically significant left ventricular outflow tract obstruction.