

We describe a case of Haemoglobin Sun Prairie, a rare form of alpha thalassaemia, caused by an unstable alpha-2-globin variant created by a point mutation in the gene coding for the globulin structure at codon 130, resulting in an alanine to proline switch. This results in an haemolytic anaemia; characterised by a low mean corpuscular volume, small mean corpuscular haemoglobin but relatively normal mean corpuscular haemoglobin concentration. This 25 year old lady is one of only a small number of people in the world with the condition, and this case report is the first reported case during pregnancy. Fertility is not an issue; her main symptoms being those of anaemia and gross haemaglobinuria, for which she was blood transfusion dependent. Potential pregnancy related complications include premature labour, intrauterine growth restriction and pre-eclampsia. Serial fetal growth scans were undertaken revealing a growth velocity within normal limits and her haemoglobin was maintained at approximately 9 g/dl, however, at 39 weeks gestation pregnancy induced hypertension developed. This necessitated induction of labour which subsequently resulted in delivery by emergency Caesarean section for presumed fetal distress. The baby had normal cord gases and good APGAR scores. This lady has gone on to have 2 further pregnancies with the delivery of 2 healthy babies. This case report illustrates that when managed appropriately, with close surveillance in a joint obstetric and haematology clinic, with serial fetal growth scans and blood transfusions as and when required, the outcome for both mother and baby are good.

PM.49 **REPRODUCTIVE LOSS FROM A MULTIPLE PREGNANCY: HEALTH PROFESSIONALS' PERSPECTIVES**

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Objective To provide an in-depth understanding of the experiences of health professionals who care for parents who have had a loss from a multiple pregnancy.

Method A qualitative study involving semi-structured interviews. Participants were recruited from two NHS Tertiary hospital units: a Critical Care Baby Ward and Fetal Medicine department. 26 health professionals from a range of clinical roles were interviewed. Data were analysed using a generative thematic approach.

Results Whilst all health professionals felt confident in administering medical care, they felt less confident when dealing with the bereavement issues of parents who may spend many months in hospital whilst surviving multiples are cared for. Staff often felt that they were 'second guessing' what parents' needs might be and feared 'saying the wrong thing' within daily interactions with parents.

Conclusion Many staff, particularly those in more junior roles, felt that they would benefit from formal bereavement training in order to understand more fully how to react effectively to parents' emotional needs. Staff also felt they lacked information regarding the formal bereavement services available to parents and were unsure as to when it was appropriate to utilise them. The value of experience was also acknowledged however, alongside the need for flexibility of approach in order to react to the specific needs of parents.

PM.50 **MATERNITY SERVICES IN THE IRISH MASS MEDIA: AN ANALYSIS OF MEDIA CONTENT FROM 2007–2012**

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The mass media play a key role in informing the public about matters of public interest and, critically, in the actual shaping of public opinion about those matters. With this in mind, the purpose of this study was to examine Irish media content and the manner in which it portrays the maternity services in Ireland.

A quantitative content analysis was conducted over the five-year time period from 2007 to 2012. Using the Nexis-Lexis newspaper database, data were sampled from three broadsheet newspapers (the Irish Times, the Irish Independent and the Irish Examiner), one tabloid newspaper (the Irish Daily Mail) and the RTE website. Articles were measured according to a pre-defined coding scheme that included variables such as article placement, storey length, topic, etc. and they were then compared against existing medical statistics.

The results showed that less than 1% of articles relating to the Irish maternity services received front page treatment over the five-year period. Medico-legal processes (18.8%), budgetary and staffing issues (15.8%) and specific high-profile cases of misdiagnosis or inappropriate treatment (9.7%) have predominated as the focus of coverage. The more clinical matters, such as breastfeeding (4.5%), neonatal care (3.3%) and post-natal depression (1.2%), have received relatively little examination.

The need for the public to have access to accurate information about medical matters is clearly of fundamental importance. However, the findings of this research suggest that there is a discrepancy between media representations of these critical issues and the medical realities, which has the potential to undermine public perception.

PM.51 **CHALLENGES OF MANAGING PREGNANCY COMPLICATED BY CHRONIC KIDNEY DISEASE STAGES 3–5: A TERTIARY CENTRE'S EXPERIENCE**

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Objectives Establish the obstetric and neonatal outcomes in women with chronic kidney disease (CKD) stages 3–5 attending renal antenatal clinic from 1999 to present.

Methods All women with excretory renal dysfunction (creatinine >110 μmol/L or eGFR < 60 ml/min) prior to their pregnancy were identified from the Obstetric-Renal database. Outcomes assessed were: small for gestational age (SGA) infants (<10th centile) calculated using the GROW¹ formula, prematurity (both <37 and <34 weeks), pre-eclampsia and mode of delivery.

Results 67 pregnancies in 55 women complicated by CKD 3–5 were identified. Three twin pregnancies were excluded from the analysis to prevent confounding of multiple gestation. Sufficient data to calculate birth centile was absent for 21 pregnancies. GROW birth centile was therefore calculated in 43 pregnancies, 14 (33%) were below the 10th centile and 25 (58%) were below the 25th centile.

Analysis of all 64 pregnancies revealed 19 babies (30%) were delivered before 34 weeks and 36 (56%) were delivered before 37 weeks. All women were delivered before 40 completed weeks. There was one stillbirth at 28 weeks and one neonatal death of a baby born at 31 weeks. 31 (48%) babies required admission to the neonatal unit. Twelve (19%) pregnancies were complicated by pre-eclampsia.

In 8 (12%) pregnancies spontaneous labour occurred and in 24 (38%) labour was induced. The other 32 (50%) were planned caesarean sections and the total caesarean section rate was 66%.

Conclusions Pregnancies complicated by CKD stages 3–5 are obstetrically high risk and women should enter pregnancy aware of the possible complications.

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PM.52 **DIAGNOSTIC ACCURACY OF SPOT PROTEIN CREATININE RATIO(PCR) IN COMPARISON TO 24 HOUR URINE PROTEIN**

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Objective To review the use of spot protein creatinine ratio as a diagnostic test for preeclampsia in comparison to 24 hour urine.

Methods This was a retrospective observational study on 100 pregnant women referred to the day assessment unit with new onset hypertension. A spot test for PCR and a 24 hour collection were commenced at the same time. Patients with renal disease, proven UTI and diabetes were excluded. Data was analysed using Microsoft Excel. Significant proteinuria was defined as a PCR value of 30 mg/mmol and 300 gms/24 hours or more with 24 hour urine. With 24 hour urine as a standard, having excluded the under and over collections, the co-relation between PCR and 24 hour urine protein was determined by Spearman co-relation coefficients. The sensitivity, specificity, NPV and PPV were calculated.

Results Of the 100 women, 7 were excluded due to proven UTI 43 patients were subsequently excluded as the 24 hour urine collections were incomplete as deemed by the urinary creatinine excretion. Among the rest of the 50 patients, The PCR values were found to correlate well with the 24 hour collection results. The test is found to have a sensitivity of 90% and a specificity of 84% with a positive likelihood ratio (LR) of 5.2 and a negative LR of 0.1.

Conclusion The 24 hr collection is cumbersome, time consuming and there can be errors in collection, while the spot PCR test compares very well to the 24 hour protein test, is easier to perform.

PM.53 **CRADLE: COMMUNITY BLOOD PRESSURE MONITORING IN RURAL AFRICA: DETECTION OF UNDERLYING PRE-ECLAMPSIA**

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Introduction In developing countries pre-eclampsia is under-detected partly due to inadequate training in accurate blood pressure (BP) measurements and insufficient equipment. CRADLE is an international study to evaluate whether the introduction of novel, low-cost, automated BP devices into rural clinics in Tanzania, Zimbabwe and Zambia increases referrals for suspected pre-eclampsia to a central referral hospital. This will be reflected in an increased mean BP in pregnant women presenting centrally.

Methods Prospective longitudinal pre- and post-intervention study. BP measurements were taken from consecutive women ≥ 20 weeks gestation who accessed care at a referral site (N = 694). Intervention: 20 BP devices were distributed to 20 rural antenatal clinics in each country. Post-intervention data was collected the following year (N = 547).

Results After adjustment for confounders, there was a significant increase in our primary outcome, post-intervention mean diastolic BP, for all women, implying an increased proportion of referred hypertensive women (2.39 mmHg, $p < 0.001$, 95% CI 0.97–3.8) and

a reduction in proportion of women (median gestation 35 weeks) who had never previously had a BP in pregnancy, (25.1% to 16.9%, OR 0.58, $p = 0.001$, CI 0.42–0.79). In Zimbabwe there was an additional significant increase in the proportion of women who had sustained hypertension (12.8% to 21.3%, OR 1.09, $p = 0.03$, CI 1.06–3.43).

Conclusion Equipping low-skilled community health providers with a novel BP device is feasible and widely accepted, and increased community referrals for suspected pre-eclampsia. A cluster RCT to evaluate the effect of these monitors equipped with traffic light early warning systems, on maternal and fetal outcomes is planned.

PM.54 **SUCCESSFUL TREATMENT OF TWO CASES OF SEVERE AORTIC STENOSIS IN PREGNANCY**

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Introduction Severe aortic stenosis can result in collapse and sudden death. Cardiac morbidity during pregnancy is related to the severity of the stenosis and symptoms.

Patient A Patient A was 41 years old with known aortic stenosis and a dilated aortic root (5 cm). At 15 weeks gestation she developed dyspnoea and chest pain. An echocardiogram was performed, which showed an aortic valve gradient of 82 mmHg with a dilated aortic root. She was transferred to a tertiary unit and balloon valvuloplasty was performed, resulting in improvement of the aortic valve gradient from 82 mmHg to 50 mmHg and in symptoms. The pregnancy progressed well and she was delivered by Caesarean Section at 38 + 3 because of the dilated aortic root.

Patient B Patient B was 25 years old with a known bicuspid aortic valve and previous treatment to coarctation of the aorta. An echocardiogram at 16 weeks gestation demonstrated an aortic valve gradient of 120 mmHg. She was admitted urgently. A balloon valvuloplasty was attempted but was unsuccessful. She was counselled regarding treatment options, which included doing nothing and risking sudden death, valve replacement or termination of pregnancy. The patient opted for a valve replacement with a prosthetic valve. She had labour induced and a vaginal delivery at 37 weeks.

Conclusion Both women had successful treatment of aortic stenosis in pregnancy, reducing their risk of cardiac morbidity and maternal mortality. Close multidisciplinary working between specialist obstetric and cardiac teams is necessary to provide the most appropriate management.

PM.55 **DEVELOPING AND DEFINING AUDITABLE STANDARDS OF CARE FOR OBSTETRIC WOMEN ADMITTED TO ITU: COMPLETING THE AUDIT CYCLE**

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There are many reports and recommendations in maternity care with some confusion and lack of clarity. Standards are available from confidential reports in maternal deaths, Clinical Negligence Scheme for Trusts, Safer Child Birth, Maternity Critical Care Working group and local trust guideline. There are local & national concerns about recognising and managing sick mothers and need for regular audit of services.

We aimed to develop and define auditable standards of care for obstetric women requiring ITU admission at Queen Elizabeth Hospital Kings Lynn NHS Foundation Trust.