

Introduction Since the introduction of a venous thromboembolism (VTE) risk assessment tool in 2011 there has been an increase in the workload of the combined Obstetric-Haematology clinic. In view of this increase a retrospective review of the size and composition of clinics during the first 12 weeks of 2011 and 2012 was carried out.

Method Clinic lists for the relevant weeks were obtained and the letters reviewed. New referrals were categorised as VTE risk assessment or other. The type of clinic and number of antenatal visits was obtained from the patient activity summary.

Results The total number of new referrals to the clinic increased by 51.4% when the first 12 weeks of 2011 and 2012 were compared. The number of referrals for VTE risk increased by 40%.

51.4% (18/35) of the VTE risk assessment new referrals made in 2012 were women with a family history of VTE, compared with 16% (4/25) in 2011. In 2012 of the women referred for a family history of VTE 61.1% (11/18) were reviewed at one further follow up appointment in the combined clinic.

Conclusions The introduction of the VTE risk assessment tool has contributed to the increase in new referrals. Many of the women reviewed do not require further Consultant input and may be suitable for review by a Specialist Midwife. The development of a Specialist Midwife role may increase Consultant clinic capacity and provide midwifery input for women who are reviewed frequently and may miss out on holistic care from their community Midwife.

PM.103 WITHDRAWN BY AUTHOR

PM.104 CASE SERIES OF 3 MATERNAL CARDIOGENIC CARDIAC ARRESTS WITH SURVIVAL IN 3 YEARS AT A LARGE OUTER LONDON UNIVERSITY HOSPITAL

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We describe 3 cases of maternal cardiogenic cardiac arrest with survival within a 3 year period.

The first case occurred in a 38 year old primiparous woman with no risk factors throughout the pregnancy. She had a spontaneous normal vaginal delivery at term but went into hypotensive collapse the day after delivery. She had a cardiac arrest from which she was successfully resuscitated. She underwent a coronary artery bypass graft some days later. Retrospectively she admitted to having had a diagnosis of hypercholesterolaemia.

The second case occurred in a 43 year old P8 woman at 32/40. She had been diagnosed in to have cardiomyopathy in the index pregnancy. She arrested in CCU where she had been admitted for observation and care. She had a perimortem Caesarean Section on the floor of CCU. The mother and baby survived.

The third case was of a 37 year old P2 who was a heavy smoker with a history of hypercholesterolaemia and CVA. She had a myocardial infarction at 19/40 for which a percutaneous stent was inserted. She had a VF arrest from which she was successfully resuscitated. She went on to have a successful normal vaginal delivery.

This case series of serious cardiac morbidity reflects the national trend of an increase in indirect deaths from cardiac disease. This is now the leading cause of death from all causes.

Should maternity units now be including cardiac arrest skills drills on their training?

PM.105 EVALUATION OF 10 YEAR TERM STILLBIRTH DATA IN A LARGE UK TERTIARY UNIT SERVING A MULTIETHNIC POPULATION

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Stillbirths at term can be devastating for both parents and obstetrician. In most cases the cause is unexplained.

Method Retrospective review of cases from 2000–2010 at a large UK teaching hospital. 220 cases were identified from the database.

Findings 21% of women were between 35–40 years. 10% of patients had BMI > 35. Majority of patients were white British (56%) followed by Asian (25%) background. Medical problems identified were Preexisting diabetes/developed during pregnancy (6%) and asthma (9%).

21% mothers had history of smoking. 40% of patients presented with reduced fetal movements. Most of the babies weighed between 3.1–4.0 Kg and abnormalities were identified in 10% after birth. Results from the placental histology revealed mild to moderate chorioamnionitis (13%) followed by infarction (7%) and thrombus/fibrin deposits (7%). Patients who agreed to have karyotyping, results revealed normal in 13% of cases but failed in 10%.

Summary Incidence of stillbirth can vary in multiethnic population due to socioeconomic inequalities. It is obvious that the risk is higher in obese women and those with medical problems. Identification of SGA may be one way by which antenatal care reduces stillbirth. Unexplained antepartum stillbirths accounted for 50% of cases, and a better understanding of these stillbirths is necessary to avoid the recurrence in future pregnancies.

Labour and Delivery Posters

PL.01 MOLECULAR MARKERS OF EARLY AND ESTABLISHED LABOUR IN HUMAN MYOMETRIUM

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The normal physiological end point of pregnancy is signalled by the onset of myometrial contractions. However, the biochemical processes may have already occurred at or before term via a series of changes in the expression of pro-labour genes. Prostaglandin H synthase (PGHS-2), CXCL-8 and oxytocin receptor (OTR) have been recognised as markers of labour. Our aim was to determine the changes in these prolabour genes during labour.

Lower segment myometrium samples were taken from pregnant women undergoing caesarean section either before labour (TNL, n = 19) or after the onset of labour. Term labour was further classified into 2 groups, early labour (EAL, cervical dilatation ≤ 2 cm, n = 19) and established labour (ESL ≥ 3 cm, n = 24). Samples were rapidly frozen at -70°C, RNA extracted and converted to cDNA.

Real-time PCR was used to measure copy numbers of GAPDH, PGHS-2, CXCL-8 and OTR.

Significant increases were seen in PGHS-2 (0.77 ± 0.14) and OTR (15.19 ± 2038) expression in EAL, when compared with TNL samples (0.26 ± 0.06 and 8.6 ± 1.61 respectively; p < 0.05 in each case). However CXCL-8 was significantly increased only in ESL (TNL, 0.38 ± 0.09; ESL 56.16 ± 46.01, p < 0.05. These data show that there are differences in the gene expression at different stages of term labour. PGHS-2 and OTR are increased in early labour whereas CXCL-8 is increased only in established labour.

PL.02 INFLAMMATORY SIGNALLING IN FETAL MEMBRANES: THE TRANSCRIPTOME OF CHORIOAMNIONITIS

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Introduction Inflammation (with or without infection) has a firm causal link and defined molecular pathophysiology for preterm birth (PTB) with histological chorioamnionitis (CA) being a sensitive and specific marker. The innate immune system uses Toll-like receptors (TLRs) to recognise different microorganisms. This study profiles TLR signalling in fetal membranes from PTBs with and without CA.

Methods Fetal membrane explants were collected from 3 groups of women; term spontaneous labour without CA (TSL^{CA}) (n = 10), PTB < 34 weeks without CA (PTB^{-CA}) (n = 8), PTB < 34 weeks with CA (PTB^{+CA}) (n = 13). CA was determined by Redline criteria (maternal inflammatory response \geq stage 2). Membranes were separated into amnion and chorion and RNA extracted. Profiling arrays were used to determine the expression profile of 84 genes associated with TLR signalling. Individual genes shown to be significantly up or down regulated ($P < 0.1$; fold change > 2) were selected for validation by qPCR.

Results In the amnion 11 genes were differentially expressed (6 between PTB^{+CA} and TSL^{CA} and 5 between PTB^{+CA} and PTB^{-CA}). In the chorion 16 genes were differentially expressed (6 between PTB^{+CA} and TSL^{CA} and 10 between PTB^{+CA} and PTB^{-CA}). Validation confirmed increased expression of TLR1 in amnion ($p = 0.03$) and chorion ($p = 0.001$) and increased expression of TLR2 in amnion ($p = 0.04$) and chorion ($p = 0.0005$) in PTB^{+CA} compared with TSL^{CA} (Figure 1).

Conclusion These data show a correlation between the presence of CA and up-regulation of TLR1 and TLR2, but not TLR6. These novel findings have implications for both the identity of the microorganisms and the mechanism(s) contributing to inflammation associated with PTB with CA.

PL.03 SELF-ADMINISTRATION OF MISOPROSTOL TO PREVENT BLEEDING AFTER HOMEBIRTHS IN UGANDA: A PILOT PLACEBO-CONTROLLED, RANDOMISED TRIAL

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Objective To pilot a study of self-administered misoprostol after home delivery for postpartum haemorrhage (PPH) prevention.

Design A pilot placebo-controlled, double-blind randomised trial

Participants Pregnant women at least 34 weeks of gestation living in Mbale district Uganda were recruited at four health facilities. High-risk women and women planning to deliver in facilities were included.

Intervention Pregnant women attending the clinics over a 2-month period were randomised to receive either misoprostol (600 μ g) or identical placebo to be self-administered orally only if they did not reach a facility for delivery. Each woman was trained on medication use and the importance of PPH. After delivery, the women were visited at home and outcome and safety data collected.

Results 748 women were randomised to either 600 μ g misoprostol (n = 374) or placebo (n = 374). 93% of women were followed up and 80% of drug packets (both used and unused) were retrieved. 56.7% of women took the study medication. Medication was taken before delivery in 2 women (both in the misoprostol group) and no harm was reported. The primary outcome (fall in Hb $> 20\%$) occurred in 7.3% of recruits. There were no significant differences between the groups in the rate of postnatal anaemia or self-reported blood loss. There was significantly more self-reported fever and shivering in the misoprostol group but acceptability of side effects was high.

Conclusion A randomised trial of self-administered misoprostol is feasible, and the pilot did not reveal major safety concerns with advanced distribution of misoprostol for self-administration.

PL.04 REDUCING CAESAREAN SECTION RATES THROUGH CHOICE AND COLLABORATION

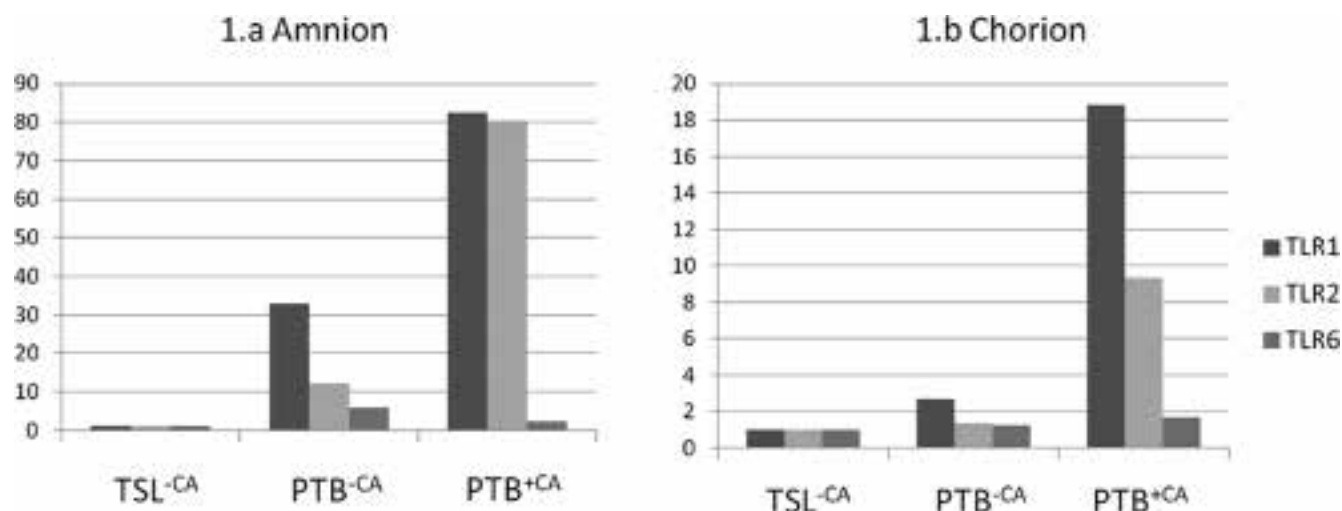
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East Lancashire Maternity services underwent a major service reconfiguration in November 2010, moving from two Consultant led units to one consultant unit and 3 midwifery led birth centres. This service now has nearly 7000 births per year, nearly a third of which are born in the birth centres.

This transformational development was achieved through a shared ethos and philosophy about childbirth and through close collaboration between obstetricians, anaesthetists, midwives and neonatologists on clinical guidelines, operational policies and clinical care. The reconfiguration has also led to a doubling of consultant presence time on our labour ward.

Our Caesarean section rates pre and post reconfiguration:



Abstract PL.02 Figure 1 Chorioamnionitis: Changes in gene expression