included; decline in renal function during pregnancy (defined as 25% increase in serum creatinine), persistent decline in renal function six months post-partum and time to renal replacement therapy. Results 49 women (57 pregnancies) with CKD stages 3-5 were identified with sufficient data for analysis. Diabetes mellitus was the underlying diagnosis in nine (16%) pregnancies. 18 (32%) pregnancies were complicated by chronic hypertension. 11 (19%) pregnancies occurred in women with previous renal transplant. 21% of women had >1 g/day proteinuria prior to pregnancy.

11 (22%) women had a decline in renal function in pregnancy. Decline in renal function at 6 months post-partum was present in a total of 16 (33%) women. Predictors of significant decline in renal function included; pre-pregnancy creatinine mean 222  $\mu$ mol/L in those with decline in function and 138  $\mu$ mol/L in those without (p = 0.0015), and significant proteinuria >1 g/day present in 87.5% (p = 0.02).

Nine (18%) women went on to need renal replacement therapy (RRT), four within a year of delivery. Mean time to RRT was 23 months. Conclusions Pregnant women with CKD 3-5 are at high risk of deterioration in renal function during and after pregnancy. Level of creatinine prior to pregnancy and significant proteinuria are risk factors for decline in function.

PM.99

# SYPHILIS SEROLOGY IN PREGNANT WOMEN OVER A PERIOD OF 7 YEARS (2005-2011) IN A LARGE MATERNITY **HOSPITAL IN DUBLIN, IRELAND**

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<sup>1</sup>A Varughese, <sup>1</sup>V Jackson, <sup>1</sup>M Cafferkey, <sup>1</sup>M Brennan, <sup>1</sup>M Lawless, <sup>1</sup>V Ciprike, <sup>1</sup>M Eogan, <sup>1</sup>W Ferguson, <sup>1</sup>S Coulter-Smith, <sup>1,2</sup>J Lambert. <sup>1</sup>The Rotunda Hospital, Dublin, Ireland; <sup>2</sup>The Mater Misericordiae University Hospital, Dublin, Ireland

Nearly 1.5 million pregnant women are infected with probable active syphilis each year, and approximately half of infected pregnant women who are untreated, will experience adverse outcomes due to syphilis, such as early fetal loss and stillbirth, neonatal death, lowbirth-weight infants, and infants with clinical evidence of infection.

Data for all patients with positive treponemal serology at booking visit from 2005 to 2011 was gathered.

Between 2005 and 2011, 179/64349 women had positive syphilis serology representing 0.28% of the patient population. These women were between the age of 19 and 41 with a higher prevalence among women of East European origin. In the 7 year period, 1 case of congenital syphilis was recorded. This patient was a DCDA twin pregnancy who booked late at 22 weeks and delivered prematurely at 23 weeks. Hence, syphilis treatment was not commenced.

This study highlights the continued prevalence of positive syphilis serology in our pregnant population. Our combined obstetric and infectious disease clinic optimises opportunities for appropriate treatment and follow-up. Contact tracing and screening for other sexually transmitted infections are also vital components of this service.

In the current economic climate, with continued emphasis on provision of cost-effective healthcare it is important to justify the cost of screening 67921 women to identify 179 cases. Untreated syphilis has a range of antenatal and paediatricsequelae and thus we recommend that screening for syphilis continues, particularly considering frequent migration of women from Eastern Europe to this country.

# PM.100 A RARE CASE OF ANTI-NMDA RECEPTOR ENCEPHALITIS IN **PREGNANCY**

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<sup>1,2</sup>E Gaughan, <sup>2</sup>S Barry, <sup>2</sup>A McHugh, <sup>2</sup>F O'Donoghue, <sup>2</sup>K O'Rourke, <sup>2</sup>T Lynch, <sup>2,3</sup>A McCarthy, 1,2J Sheehan, 1,2P McKenna. 1Rotunda Hospital, Dublin, Ireland; 2Mater Hospital, Dublin, Ireland; 3Holles St, Dublin, Ireland

Anti-NMDA receptor encephalitis is a distinct disorder characterised by the predictable sequential development of symptoms;

prodromal symptoms are initially noted, followed by prominent psychiatric symptoms, seizures, an unresponsive/catatonic state, hypoventilation, and involuntary orofacial-limb movements. This disorder usually affects young women with ovarian teratoma but may also affect women of any age or even men.

We report the case of a 32 year old primigravid woman who developed psychosis with associated catatonia and autonomic dysfunction at 8 weeks gestation. Cranial imaging in the form of CT and MRI was normal. EEG showed slow waves and anti-NMDA receptor encephalitis was suspected. This was confirmed by the finding of serum anti-NMDA antibodies. Transvaginal Ultrasound and pelvic MRI suggested normal ovaries. She required admission to the High Dependency Unit for several weeks but eventually responded to plasma exchange, steroids, azathioprine, Intravenous immunoglobulin and antipsychotics.

She had an Emergency LSCS at 32 weeks gestation for PPROM and delivered a healthy male infant. A mature cystic teratoma was found at caesarean section which was excised.

Although being rare in pregnancy, anti NMDA encephalitis can respond to aggressive treatment and can be associated with good maternal and fetal outcomes. An awareness of this 'new disease' (first described in 2005) can lead to an occasional but dramatic surgical treatment of a psychotic illness.

# PM.101 LOCALLY INVASIVE OESOPHAGEAL ADENOCARCINOMA DIAGNOSED IN THE SECOND TRIMESTER, THE OPTIONS

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K Hodson, C Lyon-Dean, MWJ MacDougall. Royal Victoria Infirmary, Newcastle Upon Tyne, UK

Oesophageal cancer is a rare malignancy to present during pregnancy. Standard treatment outside of pregnancy involves three cycles of Cisplatin, Epirubacin and 5 Flurouracil, a combination rarely used in pregnancy, followed by oesophagectomy in week 15 of treatment. We aim to highlight the management dilemmas posed by such cases, balancing the risk of treatment options in trying to achieve the best outcome for both mother and baby.

We present the case of a 31 year old primiparous woman diagnosed at 23 weeks gestation with locally invasive oesophageal adenocarcinoma.

Delay in chemotherapy treatment with early delivery by Caesarean section risked disease progression to an inoperable stage for mum, and the risk of prematurity for baby.

We elected to start three cycles of the standard chemotherapy regime without delay, with increased fetal surveillance. Maternal anaemia developed. Prostaglandin induction took place at 37 + 2 weeks gestation, resulting in a forceps delivery of a live 2050 g male infant with Apgars of 9 and 9 at one and 5 minutes. Neonatal full blood count was normal at 12 hours of age. Postnatal staging confirmed the lesion was still operable and oesophagectomy took place at the usual chemotherapy surgery time interval. Good tumour margins were achieved and the patient returned home on day ten.

We discuss our rational not to delay treatment with early delivery by Caesarean section, accepting the risk of chemotherapy in pregnancy. We review the literature surrounding this cocktail of chemotherapeutic agents and discuss the dilemmas surrounding the treatment of her anaemia.

# PM.102 THE EFFECT OF INTRODUCING A VENOUS THROMBOEMBOLISM RISK ASSESSMENT TOOL ON THE **WORKLOAD OF A COMBINED OBSTETRIC-HAEMATOLOGY CLINIC**

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<sup>1</sup>G Wright, <sup>1</sup>J Moore, <sup>1</sup>G Swallow, <sup>2</sup>B Myers. <sup>1</sup>Nottingham University Hospitals NHS Trust, City Hospital Campus, Nottingham, UK; <sup>2</sup>Lincoln County Hospital, Lincoln, UK

**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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C MacLaverty, D Obeng-tuudah. Queens and King George University Hospitals, Romford, UK

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 infaction 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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A Rehal, B Yasmaras, O Navti, T Singhal. University Hospitals of Leicester, Leicester, UK

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 Prexisting 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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<sup>1</sup>N Singh, <sup>2</sup>S Sooranna, <sup>2</sup>MR Johnson. <sup>1</sup>Chelsea and Westminster Hospital, London, UK; <sup>2</sup>Imperial College, London, UK

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  $\leq$  2 cm, n = 19) and established labour (ESL  $\geq 3$  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  $\pm$  0.14) and OTR (15.19 ± 2038) expression in EAL, when compared with TNL samples (0.26  $\pm$  0.06 and 8.6  $\pm$  1.61 respectively; p < 0.05 in each case). However CXCL-8 was significantly increased only in ESL (TNL,  $0.38 \pm 0.09$ ; ESL  $56.16 \pm 46.01$ , 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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1.2GJ Waring, 1.2SC Robson, 2JN Bulmer, 2AJ Tyson-Capper. 1Women's Services, Newcastle Upon Tyne NHS Foundation Trust, Newcastle Upon Tyne, UK; 2Institute of Cellular Medicine, Newcastle University, Newcastle Upon Tyne, UK