Conclusion Placental examination serves several vital roles in babies born with suspected HIE: it defines pathophysiology, provides important prognostic information regarding future neurodevelopmental outcome, and shows mitigating factors of medicolegal relevance to causation of brain injury. Intrapartum infection and chorioamnionitis are associated with poor neonatal outcomes including cerebral palsy. Only 30% placentas were examined in our tertiary centres, yet those examinations showed a high incidence of chorioamnionitis. The low rate of placentas being submitted for examination in neonates born depressed, coupled with the high incidence of proven chorioamnionitis in those submitted, is of great concern.

PP.43 PERINATAL OUTCOMES AND TRAVEL TIME TO MATERNITY SERVICES: ANALYSIS OF BIRTH OUTCOME DATA IN WALES FROM 1995 TO 2009

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Objective To study the association between travel time from home to hospital on intrapartum stillbirth and neonatal mortality.
Population All births to women who were resident in Wales between 1995 – 2009 (n = 498,052).
Outcome Measures Intrapartum stillbirth, early and late neonatal mortality.
Methods We calculated the travel time to all hospitals with maternity services based on the grid reference for postcode of mother's place of residence at the time of birth. We used logistic regression to obtain odds ratios for the association between travel time and outcome, adjusted for maternal age, parity, Townsend score for social deprivation and urban/rural location.
Results There were 412,827 singleton births during the study period. The intrapartum stillbirth rate was 0.3 per 1,000 (n = 135); early neonatal death rate 1.5 per 1,000 (n = 609) and late neonatal death rate 0.6 per 1,000 (n = 251). The median travel time to place of birth was 17 minutes IQR (11, 27), and the median distance travelled was 11.7 km. The risk of early neonatal death increased with travel time of at least 45 minutes to place of birth (adjusted OR 1.7 95%CI 1.2, 2.3). In order to explore whether or not birth outcomes were associated with location of maternity services we repeated the analysis using travel time from home to nearest hospital with maternity services and found no association.
Conclusion Although the risk of adverse birth outcomes is increased with longer travel times to the place of birth this is not explained by distance to the nearest hospital with maternity services.

PP.44 STRESS IN EARLY PREGNANCY IN THE AETIOLOGY OF GASTROSCHISIS: AN INCIDENT CASE CONTROL STUDY

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Background Maternal stress is associated with increased risk of spina bifida and anencephaly[1]. We investigated the effect of major stressful life events in the first trimester on risk of gastroschisis, accounting for the mediatory effects of social support and known risk factors such as cigarette smoking, low body mass index and poor nutrition.
Method We analysed data from an incident case control study of pregnant women resident in five UK regions between 01.07.2007 and 28.02.2010. Three controls were recruited for each case. Major stressful life events and social support were assessed using questions from several validated assessment tools, during interviews in the antenatal period. Logistic regression was used to obtain odds ratios for the association between maternal stress and risk of gastroschisis.
Results During the study period, 124 gastroschisis cases were identified by collaborating centres. 73% of cases (n = 91) and 70% of controls (n = 217) were recruited. In the multivariable model including social class of the mother, cigarette smoking, alcohol consumption, body mass index, folic acid and fruit and vegetable consumption, major stressful life events had an independent effect on the risk of gastroschisis (aOR 4.9 95% CI 1.2.19.4). Moving house in first trimester was also an independent risk factor (aOR 4.9 95% CI 1.7.13.9). Lack of social support was found to be a partial mediator for stress.
Conclusion These findings provide new evidence that maternal stress plays a role in the aetiology of gastroschisis, possibly through increased production of corticosteroids that have been shown to be teratogenic in animal models.

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PP.45 PRETERM CAESAREAN SECTION: THE IMPLICATIONS FOR FUTURE OBSTETRIC CARE

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Introduction Preterm birth is the leading cause of neonatal morbidity and is associated with increased rates of operative delivery. Little is known about the impact of preterm caesarean section on mode of delivery and outcome in subsequent pregnancies.
Aim To determine the impact of preterm caesarean section in primips and multips on mode of delivery and obstetric outcome in subsequent pregnancies.
Study design We designed a retrospective review of all deliveries in the Rotunda Hospital from January 1st 2000 to December 31st 2005.

All preterm deliveries (less than 37 weeks gestation) were identified and those requiring caesarean delivery formed the study cohort. All cases with previous operative deliveries were excluded and the remaining cases were reviewed for outcome in subsequent pregnancies.
Results There were 879 preterm caesarean sections during the study period representing 6.6% of all sections over the study period (879/13336).

In total 672 (76.4%) met the inclusion criteria and of these 408 (60.8%) went on to have a further delivery in the hospital. Preterm caesarean section was associated with a vaginal delivery rate of 32 to 44 percent in subsequent pregnancies. There is associated increased neonatal morbidity contributed to primarily by the high incidence of preterm birth in subsequent pregnancies (22.34%). There were also 3 neonatal deaths in subsequent pregnancies in the cohort.

The overall classical caesarean section rate was six percent and there was one caesarean hysterectomy in our cohort.
Conclusions Preterm caesarean section is associated with adverse fetal outcome in subsequent pregnancies.

PP.46 WHAT INFLUENCES A PARENT'S DECISION-MAKING FOR PERINATAL AUTOPSY? A QUALITATIVE INVESTIGATION

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Objectives This study aims to gain insight into parents' perception of autopsy and the decision-making processes.

Study design A qualitative semi-structured interview format was utilised. Purposive sampling was used to recruit 10 parents who either consented or declined autopsy from a large hospital, where there were 30 stillbirths in 2011. Interpretative phenomenological analysis (IPA) was employed as the analytic strategy. IPA allows for close examination of parents' experiences using a small purposive sample by identifying superordinate themes which highlight what is important to the participant but also detail the meaning of these phenomena in a social context.
Results Findings revealed four superordinate themes influencing parents' decision-making; attribution of death, searching for meaning, knowledge of the autopsy procedure and protective parent. Parents discussed the need for the certainty of the diagnosis as it influenced emotional reactions including difficulty in coping with the uncertainty of the outcome of a future pregnancy. Parents, who declined autopsy, strongly indicated that the key reason was to protect their child from further harm. Parents' knowledge and understanding of the autopsy process was acquired primarily from public discourse, with particular reference to television programmes, which elicited negative responses from parents due to their perception of the invasive nature of the autopsy process.
Conclusion These findings have implications for psychological models of decision making and clinical practise. This study underscores the challenges that clinicians face in overcoming public misperceptions of the invasiveness of some autopsy procedures.

PP.47 EVALUATING OUTCOMES OF SKELETAL DYSPLASIAS (SDS)

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Objective To evaluate the outcome of 543 pregnancies identified with a skeletal dysplasia or an antenatal suspected skeletal anomaly in the East Midlands and South Yorkshire (EMSYCAR) Congenital Anomaly Register over a fifteen year period.
Background Skeletal dysplasias form a large group of congenital anomalies affecting cartilage and bone growth. Strongly associated with syndromes and underlying genetic conditions, they vary in severity from lethal achondroplasias to milder osteochondroplasias. The UK Fetal Anomaly Screening Programme antenatal detection target for *lethal* SDs is 60%. Given the problems with definitive antenatal diagnosis this is difficult to achieve.
Methods Between 1997 and 2011, 982,073 births were monitored by EMSYCAR; 543 cases were identified with a SD or antenatally suspected skeletal anomaly (a birth prevalence of 5.53/10,000 births). Each case was individually reviewed to ascertain the type and severity of the skeletal anomaly as ICD-10 codes alone cannot adequately perform this function.
Results 62 (11.4%) of the 543 had fully resolved by delivery. 77 (18.4%) resulted from a chromosomal anomaly, and 65 (12.0%) had other structural anomalies. The remaining 339 (62.4%) had a skeletal anomaly (3.45/10,000), of which 206 had a SD. Of these 77 were non-lethal and 129 lethal (1.31/10,000). Overall, 93% of lethal SDs were identified antenatally, 63% within the FASP screening window ($<20^{+6}$ weeks gestation).
Conclusion Although only 38% of total cases had an isolated actual or suspected skeletal anomaly, almost two-thirds of those were lethal SDs. The vast majority were antenatally diagnosed and the FASP target achieved.

PP.48 THE IMPACT OF SEVERE MATERNAL MORBIDITY ON PSYCHOLOGICAL HEALTH AT 6–8 WEEKS POSTPARTUM – A PROSPECTIVE COHORT STUDY IN ENGLAND

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Background The incidence of severe maternal morbidity (SMM) is increasing in high-income countries as a consequence of higher caesarean section rates and more complex health needs of women who become pregnant. Access to emergency obstetric care means that for the majority of these women, SMM is unlikely to result in loss of life. However, little was known about the impact on postnatal morbidity.
Aim To assess the impact of SMM (defined as major obstetric haemorrhage, severe hypertensive disorders, critical care unit admission) on maternal health, focusing particularly on post-traumatic stress disorder (PTSD) symptoms at 6–8 weeks postpartum.
Method A prospective cohort study was undertaken of women who gave birth over six months in 2010 in one large inner city maternity unit in England. Data on health outcomes were collected on 1824 women using self-administered questionnaires at 6–8 weeks postpartum (response rate = 53%). Multivariable logistic regression analysis examined the relationship between SMM and PTSD symptoms taking into account factors that might influence the relationship. Ethics approval was obtained.
Results There was a higher risk of PTSD symptoms following SMM (OR = 3.22, 95%CI = 1.62–6.43, p = 0.001) after adjusting for all potential confounding factors. Women's higher perceived control during labour and birth and better neonatal outcomes slightly reduced the effect size of SMM on PTSD symptoms.
Conclusion Findings have important implications for women's health, and the content and organisation of maternity services. Women and clinicians should be aware that SMM can trigger symptoms of PTSD, with further work required to promote care to prevent these symptoms.

PP.49 WITHDRAWN BY AUTHOR

PP.50 WITHDRAWN BY AUTHOR

PP.51 PERINATAL OUTCOMES IN TWIN PREGNANCY IN IRELAND

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Introduction Over the past two decades multiple births have been increasing in Ireland, in 2011 17.9 sets of twins per 1,000 live births were born. This study aims to investigate adverse perinatal outcomes in twin pregnancies.
Methods A retrospective cohort study of all twin pregnancies delivered from 2009 to 2011 in a large, tertiary hospital (~8,000 deliveries per annum) in the Republic of Ireland was conducted. Birth registers, NCIU and clinic records were reviewed to examine perinatal outcomes.
Results Of the 523 twin pregnancies included in the study mean gestational age at delivery was 35.1 ± 3.8 (weeks). 79.1% (n = 413) delivered preterm (<37 weeks) of which 75.8% (n = 313) were classified as late preterm infants, delivering between 34–37 weeks. Among the 523 twins 47.5% (n = 247) were nulliparous and 16.3% (n = 87) were monochorionic (MC). Nulliparity and MC were both significantly associated with preterm delivery (p = 0.02 and p < 0.001, respectively). Both had lower mean gestational ages (p = 0.007 and p < 0.001, respectively) with significant lower birth weights (p < 0.001) compared to parous and dichorionic (DC) pregnancies. Intra-uterine fetal death (11.9% vs. 1.3%; p < 0.001), TTTS (24.1% vs. 0.1%; p < 0.001) and perinatal mortality (p = 0.002) were higher in MC pregnancies compared to DC. Mean maternal age was 33.2 ± 4.9 years and fetal anomalies increased with advanced maternal age; <40 years of age, (p = 0.01).