In the UK and Ireland, second-trimester miscarriage is defined as pregnancy loss after the 14th and before the 24th week of gestation[1]. Infection, cervical insufficiency, uterine malformations, gene polymorphisms, fetal/placental anomalies and genetic/acquired thrombophilias are known risk factors[1]; however the literature on this topic is limited. Thus, this study aimed to examine risk factors for second-trimester miscarriage.

A nested case-control study was performed using data from the multicentre, prospective Screening for Pregnancy Endpoints (SCOPE) study. Within the SCOPE cohort of 3,531 healthy, nulliparous women with singleton pregnancies, we identified cases of second-trimester miscarriage. For each case, 5 controls were selected from the SCOPE cohort; controls were matched according to centre of recruitment and age. Descriptive statistics were performed and unadjusted odds ratios were derived to assess risk factors.

8 women experienced a second-trimester miscarriage (2.3 per 1000 pregnancies); mean age was 28.6 years (SD: 6.8). On average, miscarriage occurred at 20^{+5} (SD: 20 days). An increased, though insignificant, risk was observed amongst women whose mothers had a preterm birth (OR: 4.11; 95% CI 0.56 – 29.96), maternal alcohol consumption in the first trimester (OR: 2.55, 95% CI 0.47 – 10.76) or vaginal bleeding in the first trimester (OR: 2.4; 95% CI 0.47 – 12.22).

Covariates of interest did not confer a significantly increased risk of second-trimester miscarriage, though our analysis was limited by the low incidence of second-trimester miscarriage. The understanding of second-trimester miscarriage and associated risk factors would benefit from prospective case-control studies that involve higher numbers of women.

REFERENCE

1. Edlow AG, Srinivas SK, Elovitz MA. Second-trimester loss and subsequent pregnancy outcomes: What is the real risk? *Am J Obstet Gynecol* 2007;197: 581.e1–6.

PP.33 UNCOVERING THE COMPLEX RELATIONSHIPS BETWEEN MATERNAL AGE, ANTENATAL DETECTION RATES, AND PREGNANCY OUTCOME IN CASES OF DOWN SYNDROME

doi:10.1136/archdischild-2013-303966.313

[1]CF Jordan, [2]LE Berry, [2]JLS Budd, [1]HA Mousa, [2]ES Draper. *[1]Dept. Obstetrics & Gynaecology, University Hospitals of Leicester NHS Trust, Leicester, UK; [2]East Midlands & South Yorkshire Congenital Anomaly Register,Dept. Health Sciences, University of Leicester, Leicester, UK*

Background Screening for Down Syndrome (DS) must be offered to all pregnant women in the UK, irrespective of age, between 10^{+0} and 20^{+0} weeks gestation. Current targets require antenatal detection rates between 75% and 90% of screened women.

Aim To use data from the East Midlands & South Yorkshire Congenital Anomaly Register (EMSYCAR) to explore the complex and changing relationships between antenatal diagnosis of DS, increasing maternal age and changing attitudes to termination over fifteen years.

Methods 1805 cases of DS were identified in 922,216 births between 1998 and 2011, an overall prevalence of 19.57/10,000. Cases were analysed by maternal age and pregnancy outcome, with mean gestational age at diagnosis calculated for each age group by cohort year.

Results 1025 DS cases (56.8%) were diagnosed antenatally, with the mean gestational age at diagnosis decreasing from 32 weeks in 1998/2000 to 20 in 2009/11. However, 49.1% (C.I. 42.1, 56.0) of DS cases in mothers under 25 were diagnosed antenatally, compared with 62.5% (C.I. 59.4, 65.6) for mothers over 35. While termination rates fell over time, they also differed significantly between age groups. 67.0% (C.I. 57.0, 75.9) of mothers <25 terminated an affected pregnancy compared with 83.7% (C.I. 80.5, 86.5) of those aged >34. Termination rates over time fell more abruptly among the youngest mothers.

Conclusion Despite known variation in birth prevalence of DS with maternal age, more research is needed to determine the role of maternal age in choices concerning screening uptake, consequent antenatal detection and subsequent decisions affecting pregnancy outcome.

PP.34 IMPACT OF MATERNAL OBESITY ON PERINATAL OUTCOME IN IUGR – THE MULTICENTRE PROSPECTIVE PORTO TRIAL

doi:10.1136/archdischild-2013-303966.314

F Cody, J Unterscheider, S Daly, MP Geary, MM Kennelly, FM McAuliffe, K O'Donoghue, A Hunter, JJ Morrison, G Burke, P Dicker, EC Tully, FD Malone. *Perinatal Ireland Research Consortium, Dublin, Ireland*

Objective The objective of this analysis, as part of the multicentre prospective PORTO Trial, was to study the effect of increasing maternal BMI on perinatal outcome in IUGR pregnancies.

Study design The PORTO Trial recruited 1,118 consecutive ultrasound-dated singleton IUGR pregnancies, defined as EFW < 10th centile. Maternal BMI was recorded at booking and divided into 4 subcategories. Perinatal outcomes were documented for all study participants.

Results Of the 1,076 recruited patients with complete records, 693 (64%) were of normal weight (BMI < 25), 258 (24%) were overweight (BMI 25–30), 93 (9%) were obese class I (BMI 30–35) and 32 (3%) were obese class II (BMI 35–40). Obese patients have significantly lower prospect of vaginal delivery and their offspring are at increased risk of adverse outcome (Table 1).

Conclusion Maternal obesity has a significant adverse impact on pregnancy outcomes with increased risk of Caesarean delivery, coupled with an increased perinatal morbidity and NICU admission rate.

Abstract PP.34 Table 1 Outcome for BMI Categories

	Normal	Overweight	Obese Class I	Obese Class II	p-value*
Mean GA at delivery (weeks)	38.1	37.5	37.2	35.5	<0.0001
Birthweight (g)	2543	2473	2414	1989	0.0055
Mode of Delivery					
CS	131 (22%)	65 (31%)	26 (38%)	9 (47%)	0.0003
Instrumental	75 (13%)	20 (9%)	6 (9%)	9 (47%)	
NVD	377 (65%)	122 (59%)	36 (53%)	1 (5%)	
Composite Morbidity	22 (3%)	20 (8%)	8 (9%)	7 (22%)	<0.0001
Perinatal Mortality	5 (<1%)	2 (<1%)	2 (2%)	1 (3%)	0.3391
NICU Admission	173 (25%)	77 (30%)	36 (39%)	15 (37%)	0.0031

PP.35 A FEASIBILITY STUDY FOR A RANDOMISED CONTROLLED TRIAL OF MANAGEMENT OF REDUCED FETAL MOVEMENTS AFTER 36 WEEKS GESTATION

doi:10.1136/archdischild-2013-303966.315

[1]G Bernatavicius, [2]S Roberts, [1]A Garrod, [1,3]MK Whitworth, [1,3]ED Johnstone, [1,3]JC Gillham, [4]T Lavender, [1,3]AEP Heazell. *[1]Maternal and Fetal Health Research Centre, Institute of Human Development, University of Manchester, Manchester, UK; [2]Centre for Biostatistics, Institute of Population Health, University of Manchester, Manchester, UK; [3]St Mary's Hospital, Oxford Road, Manchester, UK; [4]School of Nursing, Midwifery and Social Work, University of Manchester, Manchester, UK*

Objective Poor perinatal outcome after reduced fetal movements (RFM) is related to smaller fetal size on ultrasound scan, oligohydramnios and lower human placental lactogen (hPL) in maternal serum. We performed a feasibility study for an RCT of RFM management based on these parameters.

Methods Women with RFM ≥36 weeks gestation were invited to participate in a RCT comparing standard management (ultrasound