

**Results** The Shirodkar cerclage produced a significantly greater MGA at delivery (36.3 weeks), compared to both McDonald (33.5 weeks;  $p = 0.004$ ) and transabdominal cerclage (33.3 weeks;  $p = 0.007$ ). Elective insertion of Shirodkar, McDonald and Transabdominal cerclage was carried out in 70, 37, 25 women respectively. These produced success rates of 81.4%, 70.3% and 72% (Shirodkar vs McDonald  $p = 0.226$ , Shirodkar vs Transabdominal  $p = 0.393$ ). Ultrasound-indicated sutures were placed in 48 women (Shirodkar  $n = 24$ , McDonald  $n = 24$ ). The success rates were 92.7% and 66.7% respectively, however these were not significantly different ( $p = 0.0723$ ).

**Conclusion** These results demonstrate consistent rates in births greater than 34 weeks gestation following insertion of cervical cerclage. Although Shirodkar cerclage appears preferable in elective and ultrasound-indicated procedures, prospective randomised trials such as MAVRIC<sup>1</sup> need to be completed to confirm this.

#### REFERENCE

1. <http://www.medscinet.net/mavric/default.aspx>

#### PP.29 THE PERSONAL AND PROFESSIONAL IMPACT OF STILLBIRTH ON CONSULTANT OBSTETRICIANS

doi:10.1136/archdischild-2013-303966.309

<sup>1</sup>D Nuzum, <sup>2</sup>S Meaney, <sup>1</sup>K O'Donoghue. <sup>1</sup>Anu Research Centre, Department of Obstetrics & Gynaecology, University College Cork, Cork, Ireland; <sup>2</sup>National Perinatal Epidemiology Centre, University College Cork, Cork, Ireland

**Objective** Stillbirth remains amongst the most challenging areas in obstetric practise. In Ireland, consultant obstetricians are ultimately responsible for care provided to mothers following stillbirth. This study explores the impact of stillbirth on consultants working in an Irish tertiary maternity hospital (9,000 births per annum) where the stillbirth rate is 4.6/1000.

**Study design** Semi-structured qualitative interviews lasting 30–60 minutes were conducted in 2012 with a sample of 8 consultant obstetricians and gynaecologists. The study explored how consultants care for parents following stillbirth and the impact of stillbirth on them personally and professionally. The data were analysed using Interpretative Phenomenological Analysis.

**Results** Stillbirth was identified as one of the most difficult experiences for most consultants. Most consultants described it as amongst 'the most devastating news'. Two felt stillbirth was not the worst outcome. The human response and the weight of responsibility were the dominant personal and professional themes. All felt that bereaved parents should receive direct care from a consultant. The possibility of a medico-legal challenge was a significant factor—mostly for those who are primarily gynaecologists resulting in the question "what have I missed?". The personal impact of stillbirth is considerable: most participants were emotional during interview.

**Conclusion** Despite the impact and importance of stillbirth care, none of the obstetricians received any formal training in perinatal bereavement care. This study highlights a gap in training and the impact of stillbirth on obstetricians professionally and personally. Medico-legal concerns following stillbirth potentially impact on the depth of care and warrants further research.

#### PP.30 THE EFFECT OF MATERNAL SUBLINICAL HYPOTHYROIDISM ON THE IQ OF CHILDREN

doi:10.1136/archdischild-2013-303966.310

N Murphy, M Diviney, J Donnelly, S Cooley, C Kirkham, A Foran, F Breathnach, F Malone, M Geary. Rotunda Hospital, Dublin, Ireland

In our practise, pregnant women are not routinely screened or treated for subclinical hypothyroidism (SCH) Our objective was to compare the IQ of children whose mothers had been diagnosed with SCH antenatally with closely matched controls.

In a previous study we screened 1000 healthy nulliparous patients for SCH. Those with overt hypothyroidism were treated, whereas those with SCH were contacted postnatally for paediatric follow-up. SCH (defined as reduced free T4 with normal TSH, or normal free T4 with raised TSH) was found in 4.6% ( $n = 46$ ) All children underwent a formal neurodevelopmental assessment at age 7 to 8 years by a psychologist blinded to the original maternal thyroid status.

From the cases, 23 mothers agreed to assessment of their children as well as 47 controls. The children in the control group had higher mean scores than those in the case group across Verbal Comprehension Intelligence, Perceptual Reasoning Intelligence, Working Memory Intelligence, Processing Speed Intelligence and Full Scale IQ.

Statistical testing confirmed a statistically significant difference in IQ between the groups. This had a 95% confidence interval (.144, 10.330)

Our results highlight significant differences in IQ of children of mothers who had unrecognised SCH during pregnancy. Our study size and design prevents us from making statements on causation but our data suggests significant public health implications in terms of routine thyroid screening in pregnancy. The results of prospective intervention trials to address a causative association will be vital to address this issue.

#### PP.31 RELATIONSHIP BETWEEN BIRTH WEIGHT AND NUTRITIONAL STATUS IN PRESCHOOL CHILDREN

doi:10.1136/archdischild-2013-303966.311

G Aparício, M Cunha, M Ferreira. Polytechnic Institute of Viseu-Health School - CIGDETS, Viseu, Portugal

**Background** The intrauterine period has been considered as a very sensitive period in which nutritional and/or hormones changes appear to play an essential role in the subsequent control of body weight.

**Objectives** Classify the nutritional status of children, analysing its relationship with birth weight.

**Methods** Cross-sectional and observational study comprising 792 preschool children, average age 4.39 years old ( $SD = 0.911$ ), residents in a centre region of Portugal. Children's anthropometric measurement was obtained and the classification was based on the NCHS reference (CDC, 2000) and the birth weight classification on the WHO (2001).

**Results** Globally 66% had normal weight, 31.3% were overweight (including 12.4% obesity) and 2.7% low-weight but the differences shown to be independent from age and gender of children. 91.9% of girls and 87.1% of boys was born with appropriate weight for gestational age while 6.5% and 3.9% were born respectively light-weight and large for gestational age.

The association between birth weight and overweight revealed that 7.4% of children with overweight were born large. The relationship was statistically significant ( $\chi^2 = 21.130$ ,  $p = 0.002$ ), implying that a higher birth weight was associated with increased risk of overweight in childhood with a probability greater than 8 times ( $OR = 8.486$ , 95%  $CI = 2.443$  to 29.483) ( $\chi^2 = 13.636$ ,  $p = 0.000$ ).

**Conclusion** The results suggest significant effect of birth weight on the development of later overweight. So, children born with high weight require further monitoring and promotion of an adequate dietary pattern, in order to control early its nutritional status.

#### PP.32 SECOND-TRIMESTER MISCARRIAGE; RISK FACTORS FROM A LARGE PROSPECTIVE COHORT

doi:10.1136/archdischild-2013-303966.312

<sup>1,2</sup>A Morris, <sup>2,3</sup>J Lutomski, <sup>1,2</sup>A Khashan, <sup>1,2</sup>L Kenny, <sup>1,2</sup>K O'Donoghue. <sup>1</sup>Anu Research Centre, Department of Obstetrics and Gynaecology, University College Cork, Cork, Ireland; <sup>2</sup>Cork University Maternity Hospital, Cork, Ireland; <sup>3</sup>National Perinatal Epidemiology Centre, University College Cork, Cork, Ireland