Risk stratification for the SGA infant: is green top guideline 31 deliverable in a busy hospital setting?

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Objective

To assess the proportion of risk in our population for SGA. Our unit delivers approximately 3600 babies per annum of which there is a large proportion of social deprivation. Scotland is known to have an increased rate of stillbirth in comparison to the rest of the UK and it has been suggested this is in relation to increased rates of growth restriction. Therefore it is possible that by adopting national guidance, a greater proportion of these babies may be detected antenatally.

Methods

We recorded and anonymised information in relation to minor and major risk factors for SGA prospectively on all women booking, regardless of pathway & data was collected throughout November 2014. These women were then followed up upon delivery to identify what percentage of women underwent screening for growth restriction, and birth outcome data was analysed based on first and second-trimester determined risk for growth restriction. As part of secondary analysis, we also assessed adherence to screening for pre-eclampsia & gestational diabetes. Comparisons were made with all women who booked in November 2013 for trend analysis.

Results

Information was obtained for 196 consecutive women. 42 women were booked as high-risk. The median age category at booking was 26-30 with median BMI of 21-25. The mean gestation was 12 weeks. 64 (33%) women booked in their first pregnancy. 21 women who met the criteria for umbilical artery Doppler at 20-24 weeks, and 73 women who fulfil the criteria for serial scans. Secondary analysis is currently ongoing and will be complete by the 31st of May 2015.

Conclusion

We assume 37% of our population require serial growth scans with umbilical artery Doppler and mid-gestation uterine artery Doppler for 11% and are therefore at significant risk of SGA. This study highlights a significant potential burden on ultrasound services in our region. Secondary analysis may highlight the clinical and financial significance of these findings.