Reviewer's report

Title: Fetal Growth Restriction and the Risk of Perinatal Mortality - Case Studies from the Multicentre PORTO Study

Version: 1 Date: 5 December 2013

Reviewer: Wesley Lee

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This is an interesting summary of 6 stillbirths associated with IUGR (defined as EFW < 10th pct) in a multi-institutional study that was conducted in Ireland. The manuscript is well written and informative supplementary files are also provided.

The Introduction satisfactorily outlines the significance and background of the study.

The following major compulsory revisions should be addressed to strengthen their submission:

Methods:

a. Is the clinical practice in Ireland to scan fetuses with IUGR every 2 weeks? Some have suggested that frequent ultrasound scans are associated with increased false positive rates. For example, Mongelli (1998, Obstet Gynecol) found that at 28 weeks, the false positive rate with a two week scan interval was 11.8% - this value increased to 24.1% at 38 weeks.

b. Page 6. Precisely which Hadlock model was used to estimate fetal weight (i.e. which fetal head parameters were specifically measured – BPD and HC?)

c. Although “multi-vessel Doppler assessment was mentioned, it is unclear about how this information – aside from umbilical artery Doppler – was used in the clinical setting? The techniques for Doppler ultrasound measurements should be at least referenced if not described.

d. Can CTG results be reliably used in the clinical setting during “earlier” gestation? The company and manufacturer location of the CTG equipment should be stated.

e. How was PNMR calculated?

Results

a. Although supplementary table 2 summarizes some pathological findings, some of this information should be better described in the Results section text. Were any patterns in the pathological results apparent? I realize that this was later mentioned in the Discussion section but, it seems that pathological findings should be initially described under Results.
Discussion

a. Do the Authors have any suggestions about how IUGR should be best defined?

b. Specifically, what type of maternal and fetal vascular injuries are being referred to?

c. There are several important but, general statements about IUGR in their Conclusion. Consider placing emphasis on what was found in this study – followed by other content such as how their findings are relevant to clinical care and future research.

c. What are their recommendations regarding how the other Doppler parameters should be used for IUGR evaluation? They may wish to refer to their other recent AJOG publication on this topic.