Reviewer's report

Title: Early Childhood Development when Second-Trimester Ultrasound Dating Disagrees with LMP: a Prospective Cohort Study

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Reviewer: Mario Girard

Reviewer's report:

This is an interesting case-controls study of pregnant women identified at risk for IUGR and who underwent US examination around 17 weeks gestation, with neonatal follow-up up to 13 months after delivery. The authors found that discrepancies at 17 weeks were associated with significant birthweight differences. However, it was not associated with neurodevelopmental delay at 13 months after birth.

The main strengths include the large size of the sample and the relative long-term follow-up.

The main limitations include the absence of adequate dating and the age of the study. It has been done 25 years ago... while several countries now performed 1st trimester dating ultrasound. The authors should include and review very recent papers that look at discrepancies in the first trimester. Moreover, the authors did not discuss the type of IUGR (symmetric & asymmetric) or the potential causes, leading to another potential bias. Finally, the authors did not report the Bailey score results in the subgroup of neonates with 17 weeks’ discrepancy + IUGR at birth. In this scenario, if there is still no association with long-term development, we could potentially assume that there is actually no long-term effect of the discrepancies. Actually, it is difficult to estimate what proportions of the 17 weeks’ discrepancies were associated with incorrect LMP or real-discrepancy.

I believe that this paper should be published but the limitations should be more emphasized (even in the abstract).

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:

I declare that I have no competing interests.