Reviewer’s report

Title: Foetal aortic flow velocity waveforms in healthy and hypertensive pregnant women

Version: 1 Date: 29 October 2013

Reviewer: Rosa Maria Bruno

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Major Compulsory Revisions

1) An English revision is recommended: there are several misspellings, such as “It’s” instead of “its” at page 4, 2nd line and so on

2) From the methods section it seems that the study enrolled on the HT group only women with hypertension before the 20th week of gestation. Did anyone develop hypertension or preeclampsia after the 20th week? Where they excluded or, if not, in which group were they included? Did you measure maternal blood pressure values during the study?

3) Methods: Please add formulae used for RI and PI. In the studied population how frequently did you find a value of 0 for end-diastolic velocity? Are RI and PI normally distributed?

4) Page 2. Abstract, results: please add more detailed information (numbers, p values …).

5) Discussion is quite poor. The authors mentioned that an increase in phoetal aortic RI and PI in healthy pregnancies is expected. Which is the possible mechanism?

Minor Essential Revisions

1) Page 2. Abstract, methods: The following statement is unclear and can be removed from the abstract: “Multiple linear regression models, fitted using generalized least squares and with errors that were allowed to be correlated and/or to have unequal variances, were applied”.

2) Please check for use of abbreviations (i.e. Page 2. Abstract, results: wleas write PI and RI instead of pulsatility and resistance indices or later on AoF-PI instead of PI)

3) What is the intraobserver variability for the sonographer?

4) The example shown in figure 1 seem to show a decrease of RI and PI form the first to the third trimester. I suggest to show a more typical example.

5) Add p values on Table 2 and Figure 3.

Level of interest: An article whose findings are important to those with closely related research interests
Quality of written English: Not suitable for publication unless extensively edited

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests