Reviewer's report

Title: Mild Gestational Diabetes in Pregnancy and the Adipoinsular Axis in Neonates born to mothers in the ACHOIS randomised controlled trial.

Version: 2 Date: 2 November 2006

Reviewer: David J Pettitt

Reviewer's report:

General

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Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

1) The authors are still not fully explaining the study. This is a randomized, controlled trial, as the authors state, only if a) randomization for the ACHOIS was stratified by site AND b) ALL of the randomized subjects from this site are included in this analysis. If this is the case, the authors need to state this clearly in the text. If either a) randomization was on all 1000 women was done withouth regard to site OR b) less than 100% of the women in this site participated in this sub-study than this is NOT a randomized study but an analysis of a self-selected group of women and this should be stated clearly.

2) When measurements are made in two groups the numbers are unlikely to be exactly identical. The whole purpose of the statistical tests is to see if the difference is large enough that it is unlikely to have occurred by chance. Statements to the effect that results are different but not significantly so or that there was a non-significant tendancy make no sense. These statements should be deleted and replaced with statements that clearly state than no significant differences were found. If the authors feel that their sample size is too small to provide a realistic analysis maybe they should prefer not to publish this.

3) Now that the tables are referenced it is easier to follow the presentation of the results but they don’t always seem to be showing us the same thing.

a) the text says that adiponectin was 16% lower in the routine care group than the control group but the table shows a smaller difference.

b) The text states that leptin was higher in the routine care group than in the treatment group and that adjustment did not alter the outcome while table 3 indicates that after adjustment this difference was no longer significant.

4) The conclusions are not fully supported by the data presented. The glucose was higher in the GDM group and this was partially, albeit not significantly, corrected by treatment. After adjustment, the leptin levels were NOT higher so the conclusions should not unconditionaly state that they were nor that they were reduced by treatment. And finally, the statement that adiponectin was reduced in the GDM group but that treatment normalised adiponectin is contrary to the data presented. The adiponectin was lower in the routine care group than in the control group and lower still in the treatment group.

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Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

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Discretionary Revisions (which the author can choose to ignore)

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What next?: Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

Level of interest: An article of limited interest

Quality of written English: Acceptable
Statistical review: No

Declaration of competing interests:

I declare that I have no competing interests.