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: 1 Date: 15 August 2006

Reviewer: David J Pettitt

Reviewer's report:

General
This paper presents glucose, insulin, leptin and adiponectin in cord blood of neonates whose mothers had mild gestational diabetes (GDM) who were either treated or had routine prenatal care. Data from the cord blood of neonates whose mother did not have GDM are also presented.

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

1) My main concern was in the description of the study design. The description of the women enrolled in this study leads the reader to assume that these data are drawn from the much larger population of subjects reported recently by this group on the effect of treatment of mild GDM on pregnancy outcomes. If this is the case, then the description of the study design is misleading and needs to be clarified. That study randomized 1000 women into treatment or usual care groups and this study reports data collected from 95 of these women who "consented to be included." Thus, this is not a randomized study but includes the fewer than 10% of the women from a randomized study who agreed to also have data collected for this study as well. This should be clarified in the methods and wording changed to state that "Forty-six of the women who had been randomized to the treatment group and forty-nine of the women who had been randomized to the routine care group agreed to participate" rather than suggesting that just these 95 women were randomized. If, on the other hand, the study was done as the authors describe in their methods than it should be made clear that women enrolled in this study were recruited and randomized separately from those enrolled in the larger study. Otherwise, readers familiar with the literature that includes this group's work will assume as I did.

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

2) In several cases the authors claim "tendencies" with non-significant p-values. This may be OK in the discussion but detracts from the presentation of the results.

3) The results as presented showed no differences between treated and untreated GDM except for Leptin - a difference that disappeared with proper adjustment for other variables. And yet the first paragraph of the discussion concludes with the statement that "Maternal treatment for mild GDM partially prevented these adverse effects for the infant." This seems unsupported by the data.

Discretionary Revisions (which the author can choose to ignore)

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.