

33247-ANSWERING REVIEWERS

Reviewer 1

Portions on screening, diagnostic criteria, pathogenesis are extensive and well written. • Under the section on diagnostic criteria, some information is repeated. • Management of GDM – A concise account on current recommendations by prominent professional bodies and thresholds for initiating oral anti-diabetic medications and insulin can be added. Also, a mention of landmark trials evaluating the efficacy of OHA in GDM can be added. Recent Cochrane meta-analysis of various management options like diet, OHA can be mentioned. • Neonatal comorbidities can be elaborated further. • Grammatical errors need to be corrected. • Table 1 & 2 should be cited properly in the text.

We thank the reviewer for the suggestions. We have corrected the repeated information in the diagnostic criteria section of the manuscript. We have also added all the recommended by the reviewer data regarding the management of GDM. Land mark trials have been also added. Table 1 & 2 cited properly in the text. We also did our best to correct all the grammatical errors and improve in general the language of the manuscript.

Reviewer 2

This is a very comprehensive review of the various approaches to diagnosing gestational diabetes by an assortment of guidelines, the underlying genetics and biochemical changes associated with GDM, and a short section on management. It is quite authoritative but with a title such as 'A to Z' it should cover all areas of clinical interest. One area that is under-developed in the paper is a review of interventional clinical trials and the fact that most of them have had limited success in preventing GDM in women at risk because the insulin resistance of pregnancy is so high and difficult to alter. A review of recent RCTs such as Upbeat and DALI and what they have taught us would be useful. Also, in the diagnostic biomarker section each adipokine or other molecule is dealt with individually. There is also the approach of more global proteomics and metabolomics looking at more complex signatures and their potential usefulness that could be mentioned. Finally, there is mention of the financial ROI of various screening criteria, but these are all based on obstetric and neonatal costs. It should also be mentioned that the women with GDM is much more likely to develop Type 2 diabetes in the near future, and the offspring have an increased risk of childhood obesity and adult type 2 diabetes. Whilst it is more difficult to predict the overall cost savings over two generations, the likelihood should be mentioned that the ROI data are probably all low estimates.

We thank the reviewer for the valued comments. We ve done our best to implement all suggestions in our manuscript. In particular, we have included all the interventional clinical trials stating also the fact that most of them have had limited success in preventing GDM. Furthermore, Upbeat and DALI trials have been included as well. In addition, the rest of the reviewer's suggestions regarding global proteomics and metabolomics, as well as, financial aspects have been also implemented in the manuscript. Finally we have included a statement regarding the risk of the women with GDM to develop Type 2 diabetes in the near future, and the offspring to develop childhood obesity and adult type 2 diabetes

Reviewer 3

Very extensive review but exceedingly long article.

We have done our best to shorten our manuscript although we had also to add some extra paragraphs according to other reviewers' suggestions.