Reviewer’s report

Title: Serum magnesium and high-sensitivity C-reactive protein as a predictor for gestational diabetes mellitus in Sudanese pregnant women

Version: 2 Date: 02 Apr 2019

Reviewer: Reviewer 2

Reviewer’s report:

PEER REVIEWER ASSESSMENTS:

OBJECTIVE - Full research articles: is there a clear objective that addresses a testable research question(s) (brief or other article types: is there a clear objective)?

Yes - there is a clear objective

DESIGN - Is the current approach (including controls and analysis protocols) appropriate for the objective?

No - there are minor issues

EXECUTION - Are the experiments and analyses performed with technical rigor to allow confidence in the results?

No - there are minor issues

STATISTICS - Is the use of statistics in the manuscript appropriate?

Yes - appropriate statistical analyses have been used in the study

INTERPRETATION - Is the current interpretation/discussion of the results reasonable and not overstated?

No - there are minor issues

OVERALL MANUSCRIPT POTENTIAL - Is the current version of this work technically sound? If not, can revisions be made to make the work technically sound?

Maybe - with major revisions
PEER REVIEWER COMMENTS:

GENERAL COMMENTS: An interesting study with good design but has some issues.

REQUESTED REVISIONS:

The authors tried to assess the role of magnesium and hs-CRP in predicting GDM from the first trimester. The definition of GDM has been changed, the authors should cite the recent ACOG/ADA guidelines. The sample size is small (the authors state that the power is % 80 However, this power is for case-control studies this is a cross-sectional study design the number needed is almost 1000 patients for predicting anything). The authors report that there is no correlation between BMI and insulin indices and GDM which is well known vice-versa. Their study population is young and lean (%75 of the patients BMI are below 30) therefore the risk for GDM is very low (GDM prevalence of 15% is not appropriate for this population?). The authors either discuss this issue or add patients to their study. In page 4 line 36 the authors report that little is known about the relationship between GDM and hs-CRP. There are many studies on this issue. and reference is missing in page 4 line 43.

Note: This reviewer report can be downloaded - see attached pdf file.

**Are the methods appropriate and well described?**
If not, please specify what is required in your comments to the authors.

No

**Does the work include the necessary controls?**
If not, please specify which controls are required in your comments to the authors.

No

**Are the conclusions drawn adequately supported by the data shown?**
If not, please explain in your comments to the authors.

No

**Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?**
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

**Quality of written English**
Please indicate the quality of language in the manuscript:

Acceptable
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