Reviewer’s report

Title: EFFECTS OF FACTOR V LEIDEN POLYMORPHISM ON THE PATHOGENESIS AND OUTCOMES OF PREECLAMPSIA

Version: 1 Date: 28 Jun 2019

Reviewer: Mariza de Andrade

Reviewer's report:

This is an interesting paper that studies the effects of factor V Leiden polymorphism on the pathogenesis and outcomes of preeclampsia (PE) in pregnant women with PE in Ghana. The study has 81 subjects that consist of 3 groups: pregnant normotensive, PE and healthy non-pregnant women. Ethical committee approved the study. The objective was to investigate the effect of FV Leiden polymorphisms in PE in several measures: BMI, protein-creatinine ratio, proteinuria, full blood count (FBC), lactate dehydrogenase level (LDL), liver enzymes, BUE creatinine, lipid profile and uric acid levels. The cases are patients diagnose with PE. The controls are pregnant normotensive pregnant and non-pregnant women. The cases and controls consented to participate in the study.

The FVL mutation was extract at exon 8 and exon 10. The statistical analysis was simplistic where they used Student's t-test and ANOVA to assess significance in the clinical variables. The conclusion was that FVL has an impact in SBP, DBP, liver enzymes, WHC, hemoglobin levels and that FVL indirectly caused Uric Acid to activated macrophages then induce WBC as a mediator for innate immunity in PE patients.

Questions to the Authors:

1. The authors should explain the ancestry of the Ghana population due to the fact that FVL is a North European mutation. What is the incidence of FVL factor in Ghana subjects and in this study? Are these woman all Africans or they have Caucasian ancestry?

2. In Tables 2 and 3, did the authors perform Bonferroni correction in their results? It seems that the results get more significant when they used both control groups that indicated that non-pregnant normotensive override the pregnant normotensive group. Please explain these results. Could it be due to the fact the women are pregnant and they can have similar clinical variables with the case group?
Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

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

Yes

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

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