

Reviewer 4 comment -Round 2

Comments and Suggestions for Authors

Summary: This is a case control study with cases selected from deliveries between January 2006 and 2016. Eight cases among 8756 deliveries were noted. Controls were randomly selected from the electronic medical record database controlling for maternal age and parity with 5 controls selected for each case. The authors found that most cases occurred in the second and third trimester of pregnancy, cases had lower mean birth weight and although not significant, had higher CD rates. There was no difference in the proportion of women with gestational hypertension, gestational diabetes or preeclampsia. The authors conclude that there is no relation between the development of Bell's palsy in pregnancy and the occurrence of these late obstetrical complications but these results are not statistically significant as it is not powered to detect these differences.

Response: Thank you very much for your kind support with useful suggestions in the first review that raise the academic standard of my work.

This is a review of the second version of this manuscript:

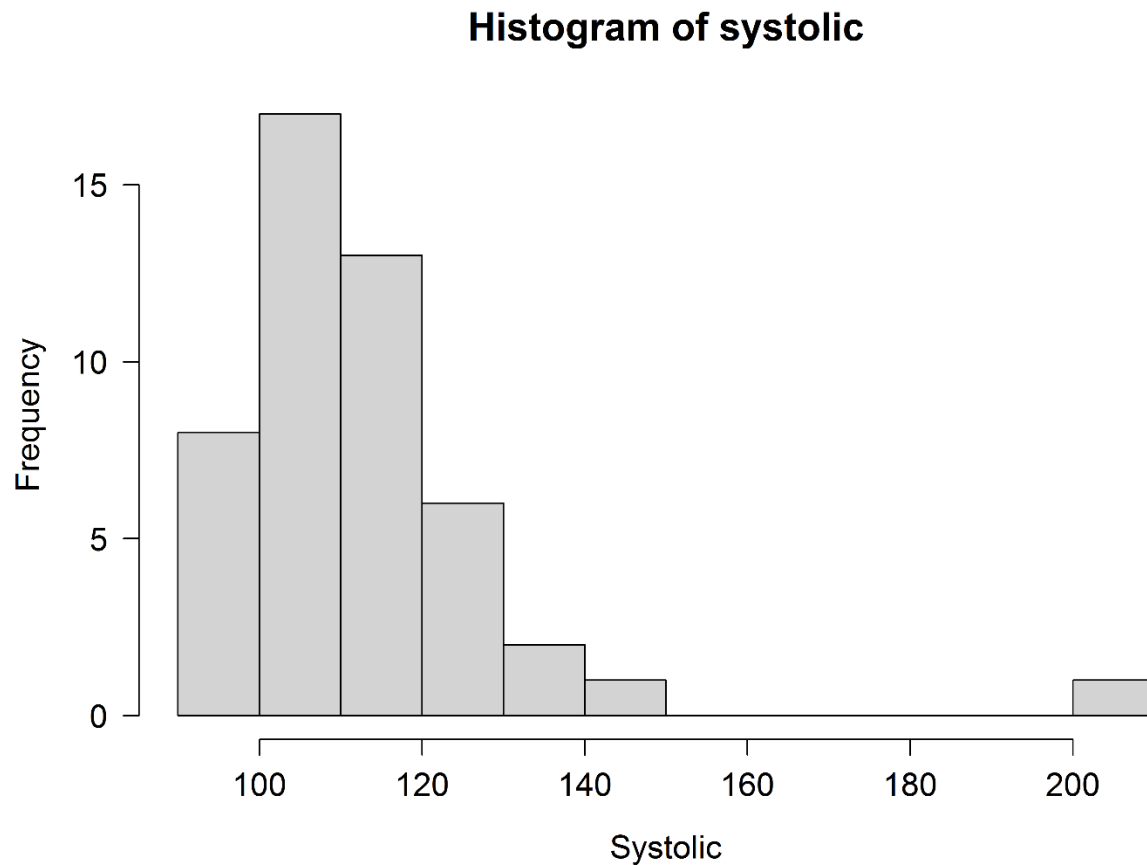
The following observations are made:

1. The title is misleading, the patient's with Bell's palsy have a higher blood pressure but this cannot be stated as elevated blood pressure. Elevated blood pressure would imply hypertension and these were not hypertensive women.
Response: The title was revised. Elevated was replaced by "Higher"
2. Page 2 line 63-64: Based on the description of the work performed, controls were not RANDOMIZED, but rather randomly selected while matching for maternal age and parity.
Response: The term was changed -- "to randomize" was replaced by "to randomly select".
3. Page 2 line 84-88: The authors define criteria for diagnosis of overt diabetes based on criteria used on non-pregnant individuals. However, these women were presumably excluded from this study based on the exclusion criteria listed under section 2.1
Response: Thank you. We agree, so the diagnostic criteria for overt DM were removed.
4. Please do not use the acronym BP for Bell's Palsy as this is most often used to signify "Blood Pressure".
Response: We agree. "Bell's palsy" was spelled out in full term.
5. When mentioning the term "power analysis" please use the proper terminology. There is no such thing as low power analysis, but rather "lack of power" or "not statistically significant"
Response: They were corrected as your advice. (Line 30, 128, 143)
6. In the discussion please focus on your results. The discussion is rather long and addresses issues not investigated in this study. The main results were lower birthweight and higher blood pressure but not elevated blood pressure, GHTN or preeclampsia.
7. Page 6 lines 209-223: this section is not relevant to the study aims, study results or study findings. You might want to consider removing.
8. Page 6 lines 225-245: None of these hypotheses are based on the data presented and the data presented does not support any of these hypotheses.
9. Page 6 lines 233-240: The data you report does not support this statement.
Response to items 6-9: We removed the paragraph which is neither the findings of our study, nor supported by our study results. Instead, a proposed relation of GBP to LOCs by the authors was briefly mentioned. (207-209)
10. On page 7, line 258-260 the discussion talks about how matching would avoid the effect that hypertension or diabetes could have on outcomes. This is confusing as women with hypertension or diabetes would have been excluded as stated in the methods section.
Response: Thank you for advice. We considered to remove DM and HT from the sentence and rewrite it. (Line 227-229)

11. The conclusion should be modified as the blood pressure was not elevated, it was higher but did not meet criteria for hypertension. The statistical analysis comparing the blood pressure between the groups was the Wilcoxon Rank Sum test, which is inappropriate. The proper test would have been student T-test.

Response: a) "Higher blood pressure" was used in place of "Elevated".

b) The data of SBP and DBP were not normally distributed (as shown below) so that Median (Q1, Q3) and Wilcoxon Ransom test was used for analysis.



Histogram of diastolic

