Reviewer's report

Title: The effect of gestational diabetes mellitus on sufentanil consumption after cesarean section: A prospective cohort study

Version: 0 Date: 11 May 2019

Reviewer: Naida Cole

Reviewer's report:

I commend you on a well-designed and interesting study. A few comments:

Introduction

1. The first sentence might read better if changed to "Gestational diabetes mellitus (GDM) is defined as high blood glucose caused by an impaired glucose tolerance detected and diagnosed during pregnancy."

2. In the first paragraph, the second sentence might well include how the diagnosis is made.

3. In the 2nd paragraph, move the reference [4] to follow the 2nd sentence instead, so it is clear that those first 2 sentences are both referring to that paper.

4. You may want to add a few more references to support the statements in paragraph 2. For example, PMID 30963325 (and other studies) also showed the higher postoperative opioid requirement in DM patients. Same thing with the proposed mechanisms at the end of this paragraph. Another paper on this is from the journal Diabetes 2015; 64: 3987-9.

5. In the last paragraph, change the second sentence to: "...gestational diabetes is usually briefer and its association with opioid consumption is unclear."

6. As you correctly state later in the paper, this design cannot address a cause-effect relationship between GDM and opioid consumption. Please change and make this clear in the Introduction final paragraph (line 43).
Methods

7. Why was an epidural placed—purely for opioid administration (which could have been given intrathecally) or is this your standard practice in case of a failed spinal?

8. Under Procedure, in the 4th paragraph, please specify the concentration of the 3mL/h sufentanil PCIA infusion.

9. Did any patients receive any other postoperative analgesics during the study period in addition to the sufentanil PCIA? If so, were these standing orders or on demand? Please describe this or if none were given, please mention this.

10. Did any patients receive other medications through the epidural intraoperatively besides sufentanil?

Results

11. Were there any surgical or medical complications (especially within the first 24 hrs) in any study patients?

12. Were there any patients who required multiple attempts for their neuraxial technique?

13. It would be very helpful to also know the size of the neonates at birth, patient comorbidities (or at least their ASA class), patient psychiatric history if any, history of substance or opioid use or chronic pain issues. Assuming these were well-matched between groups, it would reduce some obvious confounding factors. If this data is unobtainable, it should be mentioned that this is a limitation, as any of these could affect opioid use.

14. In the last paragraph, the subanalysis is interesting, but it should be qualified that the study was not powered for this outcome.
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.

Yes

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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