

Peer Review File

Article information: <http://dx.doi.org/10.21037/atm-20-1724>

Reviewer A

This is a welcome addition to the literature on ERMF, and the authors should be congratulated for an ambitious approach. Well written and transparently presented data.

The data are supportive of an immunomodulatory effect by local anesthetics. There is biologic plausibility since even women with lower lymph counts who do not receive epidurals have a higher incidence of fever.

Reply 1: Thank you for the positive comment. We believe that the lymphocyte and its immunomodulatory effects participated in the epidural-related maternal fever. We are going to do further molecular research, trying to know more about ERMF.

Reviewer B

Thank you for requesting my opinion for the review of the manuscript "Association of lymphocyte count and incidence of maternal fever in epidural analgesia-involved labor".

General comments

The manuscript is clear and causes little confusion. Some grammatical errors are to be corrected.

Here are some suggestions

It would be important to more emphasize the importance of this work. In what is it important to demonstrate that leukopenia is associated with fever during obstetrical work under epidural? What is the potential impact on the clinical practice of epidural analgesia?

Reply 1: Thank you for the suggestion. We added the importance in the Introduction section. The baseline of interleukin-6 (IL-6) was associated with maternal intrapartum fever, however, it is not feasible to examine cytokine in clinical practice. The findings would be helpful for both obstetricians and anesthesiologists to estimate the potential risk of intrapartum fever before the administration of labor epidural analgesia. (see Line 61, 62, 68, 69, 70)

Line 48: Evidence (without s), and throughout the manuscript

Reply 2: We have revised the text as your suggestion. "Evidences" was replaced by "Evidence", throughout the manuscript.

Line 50 and line 195: "The decreased lymphocyte count predicted adverse outcome in

patients (8-10)": This is true in other contexts, not in the context of the obstetrical labor, according to the references added. Please correct the references or specify the sentence.

Reply 3: We agree. References suggested that the decreased lymphocyte count predicted adverse outcome in non-obstetric patients. The sentences have been revised (see Line 64, 219).

Line 68: did not have the epidural contraindications: please specify which contraindications

Reply 4: The epidural contraindications included coagulation dysfunction, lumbar surgery history, which have been added in the text (see Line 85).

Line 76: replace records with data.

Reply 5: We replaced "records" with "data" in this sentence. (see Line 93)

Line 92: the statistics must be more specific. For each data (specifying which one), authors should specify the test used and how the data will be presented, always starting with the primary outcome, followed by then the secondary ones.

Reply 6: In the revised manuscript, we specified the statistical test for each data. Quantitative data were compared by independent t-test for normally distributed data (including age, BMI, labor length, birth weight), or Mann-Whitney test for the non-normally distributed data (including WBC, neutrophil, neutrophil percentage, monocyte, monocyte percentage, lymphocyte, lymphocyte percentage, lymphocyte/neutrophil). (see Line 108-112)

Line 123: "Monocyte percentage and the lymphocyte to neutrophil ratio were different ..." please add the actual results' number.

Reply 7: The actual number has been added in the revised manuscript. (see Line 143, 144)

The number of monocytes is not different, which is the most important information, probably more relevant than the difference in the percentage of monocytes.

Reply 8: Yes, we agree. This result suggested monocyte might not be the primary immune cell involved in the intrapartum fever.

Line 127 and line 132: Here too, the labor duration must be specified

Reply 9: The specific labor duration has been added in the revised manuscript. (see Line 148, 149, 156)

Line 131: "patients who developed intrapartum fever were more likely to be elder (≥ 35 year) and obese ($\text{BMI} \geq 25 \text{ kg / m}^2$) ($P = 0.033$; $P < 0.001$; Table 2)": The results for these two data should be separated by specifying the exact result for each and the respective P value

Reply 10: The exact results of age and BMI were added in the revised manuscript. (see Line 152, 153)

Line 137: "baseline lymphocyte showed that the parturients with intrapartum fever were more likely to have lower ($< 1.1 \times 10^9 / \text{l}$) baseline lymphocyte ($P < 0.001$; Table 2)" Please add the exact number of baseline lymphocyte

Reply 11: The exact number of baseline lymphocyte was added. (see Line 139)

Line 220: high BMI instead of big BMI

Reply 12: In the revised manuscript, "big BMI" was replaced by "high BMI". (see Line 243)