

EDITORIAL OFFICE' S COMMENTS

Authors must revise the manuscript according to the Editorial Office' s comments and suggestions, which are listed below:

(1) Science editor:

This manuscript compared epidural anesthesia with epidural puncture. Please add an explanation of why an epidural rather than spinal anesthesia was used for iterative caesarean sections, and the Results section supplements the cranial sensory block and the modified Bromage score. And supplemented with conclusions about the quality of anesthesia.

Language Quality: Grade B (Minor language polishing)

Scientific Quality: Grade C (Good)

Answer: Thanks for your suggestions.

We have explained an explanation of why an epidural rather than spinal anesthesia in this revised manuscript. In this study, we selected to compare the DPE with EA rather than SA beacause this study aimed to observe the superiority of DPE on rapid onset and the improvement of sensory and motor diffusion. (Line 84-93).

We have added the results of the cranial and sacral sensory block and the modified Bromage score as the primary outcome and the conclusions about the quality of anesthesia. (Line 48-57, 178-183, 224-230, 245-247, 317-319)

(2) Company editor-in-chief:

I have reviewed the Peer-Review Report, the full text of the manuscript, and the relevant ethics documents, all of which have met the basic publishing requirements of the World Journal of Clinical Cases, and the manuscript is conditionally accepted. I have sent the manuscript to the author(s) for its revision according to the Peer-Review Report, Editorial Office' s comments and the Criteria for Manuscript Revision by Authors.

1. The title of the manuscript is too long and must be shortened to meet the requirement of the journal (Title: The title should be no more than 18 words).

Answer: Thanks for your suggestion. I have shortened the title in this revised paper. (Line 1-2)

2. Please provide the original figure documents. Please prepare and arrange the figures using PowerPoint to ensure that all graphs or arrows or text portions can be reprocessed by the editor.

Answer: Thanks for your suggestion. I have uploaded the original figure with PowerPoint documents.

3. Authors are required to provide standard three-line tables, that is, only the top line, bottom line, and column line are displayed, while other table lines are hidden. The contents of each cell in the table should conform to the editing specifications, and the lines of each row or column of the table should

be aligned. Do not use carriage returns or spaces to replace lines or vertical lines and do not segment cell content.

Answer: Thanks for your suggestion. I have double checked the tables to ensure it meets the requirements of journal. (Revised manuscript, table 1-3)

Reviewer #1:

Scientific Quality: Grade C (Good)

Language Quality: Grade B (Minor language polishing)

Conclusion: Minor revision

Specific Comments to Authors: Manuscript 73345: Dural Puncture Epidural Technique Improves Anesthesia Quality in Repeat Cesarean Sections Compared with Standard Epidural Technique: A Double-Blind, Randomized Controlled Study It is a randomized controlled study comparing epidural anesthesia to dural puncture epidural. The authors are anesthesiologists, the statistics are done by Qi Xue (acknowledgment), a PhD of Public health. The topic is interesting and of clinical importance.

One question:

1. why do you use epidural anesthesia and not spinal anesthesia for iterative cesarean section?

Answer: Thanks for your comments. Spinal anesthesia is indeed the most commonly used anesthesia technique for cesarean section, but it is often accompanied by severe post-spinal hypotension and short duration of action. Iterative cesarean section sometimes takes up to two hours due to adhesion, then spinal anesthesia may be difficult to meet the needs of surgery. I'm sorry that I didn't make it clear in the article and have corrected in this revised manuscript. (Line 84-93)

2. Lines 20-21 the study is registered at Chinese Clinical Trial Registry, not at clinicaltrials.gov, Title: Application of epidural block technique for the dural puncture in obstetric anesthesia

Answer: Thanks for your correcting my mistakes. The study was registered at Chinese Clinical Trial Registry and the website is <http://www.chictr.org.cn>. I'm very sorry for my carelessness and now has corrected it in the revised manuscript (Line 121-123). Then, "Application of epidural block technique for the dural puncture in obstetric anesthesia" was the title of our applied subject (Applied Medical Research Project of Hefei Health and Family Planning Commission (Hwk2021yb017)). The title of this registered study was "Feasibility of dural puncture epidural block in cesarean section of parturients with scar uterus". In the process of writing and clinical trials, we made a minor revision of the title and collected indicators while the topic was consistent. Now I have explained it in this revised manuscript. (Line 121-123)

3. Abstract Background lines 37-41: I suggest to define what is dural puncture epidural technique and the indications for obstetric anesthesia Manuscript

Answer: Thanks for your suggestion. The definition of DPE and indications for obstetric anesthesia are described in this revised manuscript. (Line 94-104)

4. Introduction: Lines 74-75 are founded also in reference 5, but there are wrong data when reading reference 2 (cited).

Answer: Thanks for your suggestion. I would explained here that the content of "Lines 74-75" was indeed read from reference 5, while I cited its' one of two original references. Now I double checked the original references: Reference 2 described that "The reported incidence of adhesion development after primary CD (ie, at second CD) ranges from 46 – 65%". The other reference described that "rates of adhesion development recorded at a second cesarean delivery (CD) ranged from 24% to 46%, increased from 43% to 75% at the third, and up to 83% at the fourth CD". I would apologize for my carelessness, now I have corrected in this revised manuscript. (Line 79-82)

5. Lines 75-76 what is the relationship between placenta accreta spectrum disorder and this study?

Answer: Thanks for your comments. We mentioned placenta accreta spectrum here because invasive placentation and intra-abdominal adhesions are the two important factors on the duration of repeat cesarean section. We would apologize for losing to describe it clearly and have corrected in this revised manuscript. (Line 77-83)

6. Lines 77-78: data are from Tanzania and from the median incision, rare nowadays!

Answer: Thanks for your comments. I have added references about Chinese population undergoing their repeat caesarean section with a transverse incision in this revised manuscript. (Line 77-79)

7. Lines 93-94: "However, few data have shown whether the DPE technique can be applied in RCD." Need references I suggest to add what is already known about the safety and efficacy of the Dural Puncture Epidural Technique for iterative cesarean section and what is the gap in this topic?

Answer: Thanks for your comments. I have added the safety and efficacy of DPE on labor analgesia, in lower abdominal surgery and cesarean delivery for morbidly obese parturient. However, I didn't find the clinical report about DPE technique for iterative cesarean section. (Line 107-110)

8. One more question: DPET is easy to done? when comparing to spinal anesthesia?

Answer: Thanks for your question. DPET is an improvement of CSE technology which corrected the drawback of slow onset and limited diffusion of epidural anesthesia and reduced the incidence and severity of hypotension after CSE. The operation method is the same as that of CSE, except that local anesthetic is not injected into subarachnoid space via spinal needle. (Line 84-91)

Reviewer #2:

Scientific Quality: Grade D (Fair)

Language Quality: Grade B (Minor language polishing)

Conclusion: Major revision

Specific Comments to Authors:

1. The article is about DPE efficacy in repeated CS. Title: is lacking. What is the anesthesia quality? you have to be more specific in the title. looks like the primary outcome was the T6 block onset time.

Answer: Thanks for your comments. The anesthesia quality includes: the onset time, the sense and motor block degree and the side effects. I'm sorry for losing to elaborate the topic of the study in the title. In this revised manuscript, the primary outcome was corrected as the onset time and the sense and motor block degree. (Line 48-57, 178-183, 224-230, 245-247, 317-319)

2. Abstract: Background is talking about analgesia while the study is about the onset time.

Answer: Thanks for your comments. I had corrected the primary outcomes with the onset time and the sense and motor block degree. (Line 48-57, 178-183, 224-230, 245-247, 317-319)

3. This Methods need some info about technique of DPE. What was the percentage of each LA in the mixture of lidocaine and ropivacaine?

Answer: Thanks for your comments. The information about DPE and the percentage of each LA in the mixture of lidocaine and ropivacaine were added in this revised manuscript. (Line 155-164)

4. Results: what's the head-side sensory block and modified Bromage score ? are they you 2ndary outcomes? you have to mentioned it in the methods. same as IV analgesia and (so many 2nday variables which the study is not powered for those. unfortunately, this number of variables will bring the fishing phenomenal which is not acceptable in research method.

Answer: Thanks for your suggestion. The head-side sensory block means the sensory block on the cranial side and modified Bromage scores are used to evaluate the motor block degree. In this revised manuscript, the cranial and sacral sensory block levels and motor block degree were corrected as primary outcomes so as to prove the ability of DPE on improving the quality of anesthesia more forcefully. (Line 224-230)

5. Each variable need the number and 95% CI and P value.

Answer: Thanks for your suggestion. I have corrected the variables as your instructions. (Table 1-3)

6. Conclusion is also lacking about the anesthesia quality. What is the anesthesia quality? this was not your primary outcome.

Answer: Thanks for your suggestion. The anesthesia quality includes: the onset time, the sense and motor block degree and the side effects. I'm sorry for losing to elaborate the topic of the study in the title. In this revised manuscript, the primary outcome was corrected as the onset time and the sense and motor block degree. (Line 48-57, 178-183, 224-230, 245-247, 317-319)

7. Text; introduction > long and unnecessary. Why RSD is deferent, this has noting to do with China's policy on population control. DPE technique in not complete, even in the introduction.

Answer: Thanks for your suggestion. I have corrected the introduction

according to your instruction. (Line 73-77, 94-111)

8. Reference is needed for your sample size calculation.

Answer: Thanks for your suggestion. Reference 21 was added as a reference for sample size calculation in this revised manuscript. (Line 196)