OPEN PEER REVIEW

Open Peer Review (OPR)

As a new feature for progressing towards transparency, we decided to open a new window for all of our editors as well as authors titled "**Open Peer Review**". We hope by this new facility, our reviewers will be more motivated and authors will be more satisfied with the review process. We believe that publishing our peer review reports could make a transparent and clear environment for all our efforts within a journal, but not all reviewers tend to publish their comments.

What is "Open Peer Review" process?

An "Open Peer Review" process is making the details of all review process (including reviewers, associate editors, and EICs comments) as "Public" as it is agreed by EIC, Authors, and reviewers.

Advantages of "Open Peer Review" process

- More transparency, constructiveness and tactful comments of the peer review process: leads to an increase in the quality of reviews
- More motivations for all involved roles in the review process
- Authors' satisfactions from the review process: Increases honesty between authors and reviewers
- Education of both authors and new students
- Prevents reviewers from following their individual agendas and leading to the detection of reviewers' conflicts of interests

You can find out more at:
https://brieflands.com/briefland/knowledgebase/category/tree.html#opr.html

Anesthesiology and Pain Medicine
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Peer Review Report for "Erector Spinae Plane Block for Children Undergoing Cardiac Surgeries via Sternotomy: A Randomized Controlled Trial"

Author(s): Ahmed Ali Gado, Wafaa Mohamed Alsadek, Hassan Ali, Ahmed Abdelaziz Ismail

Review Timeline:

Submit Date: 28 Feb 2022
Revised Date: 25 Mar 2022
Accepted Date: 25 Mar 2022

Revision (0)

Here, you can see the **Reviewers**, **Associate Editors** and **EICs'** comments from the beginning to the end of the revision process.

REFEREE: Reviewer | Revision (0)

13 Mar 2022

Dear AE,
Thank you for submitting the manuscript entitled “Erector Spinae Plane Block for Children Undergoing Cardiac Surgeries via Sternotomy. A Randomized Controlled Trial.” I read the article and found it useful and it is a well-written RCT report, however, there are some issues that I would like to mention:
- As your patient underwent CPB and may need some vasopressors during CPB and also need some inotropic agents during and after separation from CPB, how do you discriminate increase BP and HR from a drug-induced one or the need for more analgesic drug (Fentanyl)?
- Did you use BIS monitoring?
- Please explain more about the dosage of vasopressor-inotropes witch you used during and after the operation.
- How do you assess ESP block success in the anesthetized patient?
- Suggest these references:
- Edinoff AN, Girma B, Trettin KA, Horton CC, Kaye AJ, et al. Novel Regional Nerve Blocks

in Clinical Practice: Evolving Techniques for Pain Management. Anesth Pain Med. 2021;11(4):e118278.
- Edinoff AN, Houk GM, Patil S, Siddaiah H, Kaye AJ, Iyengar P, et al. Adjuvant Drugs for Peripheral Nerve Blocks: The Role of Alpha-2 Agonists, Dexamethasone, Midazolam, and Non-Steroidal Anti-Inflammatory Drugs. Anesth Pain Med. 2021;11(3):e117197.
- Edinoff AN, Fitz-Gerald JS, Holland KAA, Reed JG, Murnane SE, Minter SG, et al. Adjuvant Drugs for Peripheral Nerve Blocks: The Role of NMDA Antagonists, Neostigmine, Epinephrine, and Sodium Bicarbonate. Anesth Pain Med. 2021;11(3):e117146.
- Ismail AA, Mohamed Hamza H, Ali Gado A. Efficacy of Dexmedetomidine Versus Morphine as an Adjunct to Bupivacaine in Caudal Anesthesia for Pediatric Thoracic Surgeries: A Randomized Controlled Trial. Anesth Pain Med. 2021;11(2):e112296.
Sincerely

REFEREE: Reviewer | **Revision** (0) 14 Mar 2022

Dear AE,
Thanks for submitting of manuscript entitle" Erector Spinae Plane Block for Children Undergoing Cardiac Surgeries via Sternotomy. A Randomized Controlled Trial." It seems the issue is interesting and good study design. I read this manuscript and the following points should be considered by the authors.
- In abstract: Add numeric data in the results section.
- Write the keyword according to the MESH database.
- Add Randomization online site address.
- The structure (mg/kg, mg.kg) becomes uniform.
- How was the evaluation of the ESP block?
- Considering the effect of vasopressor and inotrope drugs on blood pressure and heart rate, have these drugs been used, and what is the dose?
- Has depth of anesthesia been used?
- Consider below references:
- Imani F, Zaman B, De Negri P. Postoperative Pain Management: Role of Dexmedetomidine as Adjuvant. Anesth Pain Med. 2020;10(6):e112176.
- Malik KM, Imani F, Beckerly R, Chovatiya R. Risk of Opioid Use Disorder from Exposure to Opioids in the Perioperative Period: A Systematic Review. Anesth Pain Med. 2020;10(1):e101339.
- Rahimzadeh P, Imani F, Faiz SHR, Boroujeni BV. Impact of the Ultrasound-Guided Serratus Anterior Plane Block on Post-Mastectomy Pain: A Randomised Clinical Study. Turk J Anaesthesiol Reanim. 2018 Sep;46(5):388-92.
- Alimian M, Imani F, Rahimzadeh P, Faiz SHR, Bahari-Sejahrood L, et al. Adding Dexmedetomidine to Bupivacaine in Ultrasound-guided Thoracic Paravertebral Block for Pain Management after Upper Abdominal Surgery: A Double-blind Randomized Controlled Trial. Anesth Pain Med. 2021;11(6):e120787.
Kind Regards

REFEREE: Associate Editor | **Revision** (0) 14 Mar 2022

Dear EIC,
According to reviewer's comments, this manuscript has need to minor revision.

Kind regards

REFEREE: EIC | **Revision** (0)

15 Mar 2022

Dear Author,
Your article is reviewed by the reviewers carefully. According to their comments, this document needs minor revision. Please follow their comments as requested.
Thanks.

OPEN PEER REVIEW

Revision (1)

Reply to Reviewers

Ideally, the reviewing process can significantly improve the submitted manuscripts by allowing the authors to take into account the advice of reviewers. Author(s) must reply to all reviewers' comments in a separate Word file, point by point. A "**Reply to Reviewers**" document is submitted along with revised manuscript during submission of revised files, summarizing the changes that the authors made in response to the reviewers' comments. The responses to reviewers' comments specifies how the authors addressed each comment the reviewers made.

You can read the authors' responses to the reviewers' comments in the next page.

Reply to reviewer 1;

1 - As your patient underwent CPB and may be need some vasopressors during CPB and also need some inotropic agents during and after separation from CPB, how you discriminate increase BP and HR from drug induced one or need for more analgesic drug (Fentanyl)?

To avoid this conflict, we did not include complicated cardiac surgeries or cardiac surgical procedures of long duration which may require usage of high inotropic support and vasopressors. It was a limitation we faced and mentioned in the manuscript of this study. The used intropic agents and vasopressors were minimal or even not used in the types of surgery enrolled in this study.

We usually use a standard protocol of inotropc support for weaning of cardiopulmonary bypass which is milrinone 0.25 to 0.5 mic/kg/min. It has minimal effect to increase heart rate and blood pressure. The next inotropic agents we use are norepinephrine and epinephrine at dosage range from 0.01 to 0.05 µg/kg/min.

2- Did you use BIS monitoring? NO

3- Please explain more about dosage of vasopressor-inotropes witch you used during and after operation.

During bypasss, we use boluses of phenylephrine. After cardiopulmonary bypass, we usually use a standed protocol of inotropc support which is milrinone 0.25 to 0.5 mic/kg/min which has minimal effect to increase heart rate and blood pressure. The next inotropic agents we use are norepinephrine and epinephrine at dosage range from0.01 to 0.05 µg/kg/min.

4 - How you assess ESP block success in anesthetized patient?

We depended on ultrasound guidance for anatomical location of the the needle tip and injection of local anesthetic agent in the target space

5. One of the suggested references is added.

Reply to Reviewer 2:

1-In abstract: Add numeric data in the results section. ADDED

2 -Write the keyword according to MESH database. DONE

3 -Add Randomization online site address. ADDED

4-The structure (mg/kg, mg.kg) becomes uniform. CORRECTED

5-How was the evaluation of the ESP block?

We depended on ultrasound guidance for anatomical location of the the needle tip and injection of local anesthetic agent in the target space.

6-Considering the effect of vasopressor and inotrope drugs on blood pressure and heart rate, have these drugs been used and what is the dose?

To avoid this conflict, we did not include complicated cardiac surgeries or cardiac surgical procedures of long duration which may require usage of high inotropic support and vasopressors. It was a limitation we faced and mentioned in the manuscript of this study. The used intropic agents and vasopressors were minimal to low in the types of surgery enrolled in this study.

We usually use a standard protocol of inotropc support for weaning of cardiopulmonary bypass which is milrinone 0.25 to 0.5 mic/kg/min, which has minimal effect to increase heart rate and blood pressure. The next inotropic agents we use are norepinephrine and epinephrine at dosage range from 0.01 to 0.05 µg/kg/min.

7- Has depth of anesthesia been used? NO

8. One of the suggested references is added.

OPEN PEER REVIEW

Revision (1)

Here, you can see the **Reviewers**, **Associate Editors** and **EICs'** comments from the beginning to the end of the revision process.

REFEREE: Reviewer | **Revision** (1) 25 Mar 2022

Dear AE,
This revised manuscript was reviewed, and the majority of the necessary corrections were made
Sincerely

REFEREE: Associate Editor | **Revision** (1) 25 Mar 2022

Dear EIC,
Fortunately, the author could correct the majority of the requested items, and based on reviewers' comments, this revised format is acceptable for publishing.
Regards

REFEREE: EIC | **Revision** (1) 25 Mar 2022

Dear Author,
The document is reviewed carefully by the reviewers. According to their comments and your revisions as requested, this manuscript is accepted.
Thanks.