Reviewer's report

Title: COMPARISON OF THE EFFICACY OF ERECTOR SPINAЕ PLANE BLOCK PERFORMED WITH DIFFERENT CONCENTRATIONS OF BUPIVACAINE ON POSTOPERATIVE ANALGESIA AFTER MASTECTOMY SURGERY: RAMDOMIZED, PROSPECTIVE, DOUBLE BLINDED TRIAL

Version: 0 Date: 16 Nov 2018

Reviewer: Emine Aysu Salviz

Reviewer's report:

TITLE: EVALUATION OF EFFICACY OF ERECTOR SPINAЕ PLANE BLOCK PERFORMED WITH TWO DIFFERENT BUPIVACAINE CONCENTRATIONS ON POSTOPERATIVE ANALGESIA OF PATIENTS UNDERGOING MASTECTOMY SURGERY

Use the English language better!

ABSTRACT:

Line 9, 29, 39…: "requirement" would be a better word to choose instead of "need" all through the manuscript (not only the abstract)

Line 27: "consumption" instead of "consumptions"

How many patients?

You did not mention postoperative fentanyl and morphine as rescue analgesics here.

Key words: "ultrasound" would be better instead of "ultrasonography"

Groups can be written as Group I and Group II instead of low and high dose groups, and none is a control group (do not use it all through the manuscript).

BACKGROUND:

Line 13: "In addition, additionally or moreover" instead of "Besides"

Line 29-30: Place ref 6 at the end of the sentence.

Line 31-41: Merge 2 sentences of ref 7. Place ref 7 at the end of the sentence.
Line 46-53: So, in this study….. (make it a better and clear sentence, use the language better)

Line 54: "Our secondary aims are to….fentanyl requirement…"

METHODS:

Line 44: Is not this too high for a patient who is in sitting position? "…intravenous 0.05 mg kg-1 midazolam for sedation."

Line 17: "…..trapezius, rhomboideus and erector spinae muscles,…"

Line 31-34: This sentence should not be written here. Do not write or give its statistical results in demographic data table as "block duration". "The block procedures took approximately 5-10 minutes, then the patients were placed in supine position."

Line 7-10: "All patients received an IV patient-controlled analgesia (PCA) device in the recovery room." ….Intravenous was used before, put "(IV)" there and use "IV" as its short form for the rest of the manuscript.

Line 10: "IV" instead of "intravenous"

Line 9-12: "The PCA device was adjusted to administer 10 mg IV bolus dose of tramadol with a 20 minute lock-time without basal infusion."

Line 14-17: Place the parenthesis at the appropriate sites for this sentence. "NRS ranges from '0' (that means "no pain" to '10' (that means "worst pain imaginable")."

Line 22-23: When did you start the IV PCA? Did you give additional fentanyl although they were receiving tramadol by PCA? Clear this please.

Line 27-29: You did not mention your follow-up at postoperative 1st, 2nd and 6th hours within the abstract.

Line 32: Patients already have IV tramadol PCA, after having 10 mg tramadol bolus how long do you wait for NRS≥4, and give morphin? There should be restrictive frames for using fentanyl and morphine as rescue analgesics, otherwise you cannot compare tramadol consumption and use it for the primary outcome.

Line 37: Out-come or outcome?

Line 0-1: The mean tramadol consumption was 196.6±29.38 mg and 142.6±28.34 mg in low and high ESP groups, respectively.

Line 5: Delete "each"
Line 14: Student's t-test

Line 18: Mann-Whitney U test

Line 21: …ratios…

Line 26: …, repeated measures test…

Line 23: Delete "A p value < 0.05 was accepted as statistically significant". It is already written at the end of the paragraph

RESULTS:

Line 4: You said 21 patients per each group would be enough in statistics paragraph, now you say that 44 patients were screened. !?!!??!

Line 6: Figure 1 does not come first at the end of the PDF

Line 8-11: "Two patients in each group had pain in the injection site as the complication of block intervention in the postoperative period." This would be the one of the last sentences of Results part. Firstly mention the demographic data and primary outcome, not the side effect/complication. This does not need to be within the table.

Table 2: Write "Rescue analgesic in RR (fentanyl) and Rescue analgesic in SW (morphine)"

Line 33-35: You say "The median NRS scores of the patients were significantly high in Low ESP group at the postoperative 15th, 30th, 60th, 120th minutes…". However fentanyl was not used in both groups in the RR. If there is pain, why fentanyl was not used.

Table 3 and Figure 2: You say that the pain is increasing after 15th minute and emphasize this in both groups and we think that the block did not work in both groups. However, it works, they increase, yes, but all NRS scores were below 4 and you did not give any fentanyl in RR. Please demonstrate it, use your data well to give the results.

Line 26: The MAP measurements of the groups were similar to each other at all time points.

Focus on you main outcomes. You told a lot about HR and MAP. They are not main outcomes of this study. Moreover; if a result is already in the table, you do not need to explain it again and again within the results part.

Line 44-49: How do you know that it is severe nausea, did you use any scale?
DISCUSSION:

In the beginning, you spent a lot of sentences to tell other authors' studies. After each result of theirs, please give your results and discuss yours in each paragraph.

Line 11: "Moreover" instead of "besides"

Line 19-22: Correct the sentence "In the last two years, ESP block was reported to successfully provide analgesia for several different painful conditions."

Line 0: "In addition" instead of "besides"

Line 5-7: "…known to allow better diffusion into the…”

Line 7-9: "We do not make sure whether " instead of "We can't be sure whether"

Line 32-36: It is not appropriate to write this "According to these data, we may suggest that a higher concentration of a local anesthetic agent may pass through to the paravertebral space to affect the ventral branches.". The distribution is not about concentration…You need to tell your suspicion in another way!

Line 12: High concentration group has less PONV, how do you explain this?

Line 29: "…none of our patients required rescue…” Delete "for"

Figure 2: Time points and graph lines are not correctly aligned

IT WOULD BE GOOD TO HAVE GRAPHS FOR YOUR PRIMARY OUTCOME (TRAMADOL) (I ASSUME THAT YOU ALSO TAKE THE DATA OF TRAMADOL CONSUMPTION AT THE TIME POINTS OF NRS SCORES)

Are the methods appropriate and well described?  
If not, please specify what is required in your comments to the authors.

No

Does the work include the necessary controls?  
If not, please specify which controls are required in your comments to the authors.

No

Are the conclusions drawn adequately supported by the data shown?  
If not, please explain in your comments to the authors.

No
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 recommend additional statistical review

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Needs some language corrections before being published

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