Author’s response to reviews

Title: Sciatic obturator femoral technique versus spinal anaesthesia in patients undergoing surgery for fixation of open tibial fractures using Ilizarov external fixator. A randomised trial

Authors:
hoda shokri (drhoda10@yahoo.com)
Amr Kasem (amr290@gmail.com)

Version: 2 Date: 29 Oct 2019

Author’s response to reviews:
Reply to Dita Aditianingsih, M.D., Ph.D (Reviewer 1) comments: Thank you for your valuable comments

1-paraesthesia/ paresthesia instead of parathesia for abnormal dermal sensation as one of block complication

It has been corrected in p.2, line 39 and p.5 line 56.

2- The duration of soft block and time …" Please use consistent capitalization (soft / SOFT)

It has been written as SOFT through the whole manuscript

3- Please adhere to one English style either British or American English, as required from BMC

We adhere to English style

4-This manuscript still got plenty of room for grammar and redactional improvement.

5-Please refer to uploaded attachment for additional comments

All grammar errors have been corrected and all changes done in the uploaded have been done.

Background
6-Please give abbreviation note in brackets for first use (page 4, line 15 US-guided)

It has been deleted.

Methods

7-Why did the authors use Bupivacaine 0.25% for SOFT block?
Performance of multiple nerve blocks requires large doses of bupivacaine. For this reason, we have to be alert about the risk of LA toxicity which causes convulsions at plasma level 4 µg/ml so enantiomers LA with lower concentration has to be used [15] and we found that it theoretically provides adequate anaesthesia for this type of surgical procedure. From review of literature, we found that bupivacaine is as efficient as levobupivacaine and more efficient than ropivacaine, also bupivacaine is more available in our hospital.

8- ECG should be unabbreviated
It has been written unabbreviated.

9- Results
-Demographic data: for sex data, author could show the most prevalent group only
We wrote only the most prevalent sex group

-How about the time to first effect after the block?
It has been added to the results in table 2.

10- Discussion
-The paragraph punctuations and discussion could use more improvements and elaborations, written in a better flow and connecting previous studies with this study's findings rather than citing and mention their findings.
-Same topic paragraph could be merged
The discussion has been corrected.
-As the authors stated that the SOFT block is a recent block, some background of the block could be added
It has been written in p.7 line 201-206.

Reply to raffaele aspide (Reviewer 2) comments: Thank you for your valuable comments

1) Methods: pag 3 line 61, are the enrolled patients consecutive or not
Yes, consecutive added in p.3, line 89.

2) Methods: pag 4 line 15, are the patients in urgency/emergency procedures or elective surgery?
Only in elective surgery, added in p.3, line 90. Urgent procedures have been added to the exclusion criteria.

3) Methods: pag 4 line 31, Astra Zenica ? or AstraZeneca ?
AstraZeneca has been written in p.4 line 108, line 121.

4) Methods: pag 4 line 38, before SOFT block no superficial anesthetic wheal were performed? It has been added to p.4 line 114.
5) Methods: pag 4 line 54, Astra Zenica ? or AstraZeneca ? it has been corrected to AstraZeneca.

6) Methods: pag 5 first line, no other twitches before the injection for the other blocks during SOFT? Please, explain better
Only in sciatic nerve, 20 mL of bupivacaine 0.25% was injected after needle had elicited tibial twitches using 1 mA current, other blocks were done without muscle twitches, this is made clear in p. 4, line 120-127.

7) Methods: pag 5 line 6, what do you mean exactly for "evaluating for 20 min? after completing it? is it 25 min the duration of the SOFT block? Please, explain better
It has been explained better in p.4 line 126, 127.

8) Methods: pag 5 line 17, may you insert in the text which is the success rate of the block? It has been added in p.4, line 130,131, all recruited patients successfully completed the study.

9) Secondary endpoints: I think that back pain and post-dural puncture headache are proper of spinal anesthesia, looking to your results (table 2) are respectively 0% and 2% in SOFT group, are you sure to insert them in to the endpoints? They have been deleted from the secondary outcomes.

10) Methods: pag 5 line 52, which is the percentage of failure of the block? Definition of failure has been written in p.5, line 156, unfortunately we didn't measure the failure rate in the results as none of the patients was excluded because of the failure of the technique and this was written in study limitations.

11) Results: pag 6 line 31, vital data perhaps better "vital signs"
It has been corrected

12) Results: pag 6 line 39-41, mistake even looking the table 2: are "hours" not minutes!
It has been corrected.

13) Results: pag 6 line 48, again Results about headache incidence…idem
They have been removed from the results.

14) Discussion: pag 7 the great limitation in the clinical utility of this study is the fact that spinal anesthesia is a widespread method and that anesthesiologists have great practice, while SOFT block is a new, complex technique, which includes a learning curve. The authors have the merit of having applied it correctly and on a significant sample size, but it is absolutely necessary not to forget the difficulty of learning and therefore the diffusion of an alternative technique. Furthermore, the longer duration of the anesthetic procedure has a non-negligible incidence in the management of an entire surgical session, especially in an urgent context. In my opinion, these observations should be included in the discussion or partially in the limitations.

This has been written in p. 7, line 203-206, p.8 line 264-268
15) Discussion: please, underline the novelty of this study compared with to other studies included in to the discussion, probably the power ???
It is written in p.7, line 201-206

16) Conclusion: line 40, I think that "SOFT block is a feasible technique for control of postoperative…" can be better if start from the idea the SOFT block is a "….feasible technique of local anesthesia…."
It has been added.

17) Table 1: last line, probably you mean "surgical procedure duration"…. Or total duration? please, specify surgical procedure duration is written in table 1

18) Table 3: I think that VAS results are interesting and useful to stress/underline in the analysis of the results
This has been done in p.6, line 196-198.

19) Fig 1: I didn't find the caption, I am unable to assess/read the image, please, describe better the figure, even adding a figure of the injection technique
It has been repeated

20) Fig.2: please, describe well this figure adding a caption and changing the color of the outline, I really don't understand "LA Local Anesthetic"
It has been repeated to show LA spread around the femoral nerve and clear figures are added.

21) Fig.3: please, insert in to the flow chart the steps of the follow up in hours, probably can describe better the work you did
It has been added.
All figures have been updated