Reviewer's report

Title:Bispectral index-guided general anaesthesia in combination with interscalene block reduces desflurane consumption in arthroscopic shoulder surgery: a clinical comparison of bupivacaine versus levobupivacaine

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Reviewer:Jaime Ortiz

Reviewer's report:

The manuscript poses an interested question, but not very novel. It is expected that you will receive better analgesia from a nerve block vs not, and that the amount of general anesthetic agent used will be less. I see this every day in practice. Having said that, it is still interesting to approach this question by looking at use of Desflurane during surgery.

Overall it is a well written manuscript, easy to read. I only found a couple of minor spelling mistakes.

The methods are clearly explained and appropriately performed. The overall data collected seem sound.

Major compulsory revisions

1. How was power calculated? What was the predicted effect difference? Did you have pilot data comparing the 2 local anesthetics to each other, and comparing block vs no block? How could you predict the difference in Desflurane use in order to power the study? How exactly did you come up with 19 patients per group? This seems low for a 3 group study. Why not do a study comparing levobupivacaine to bupivacaine directly?

Minor essential revisions

2. The Figures and Tables and fairly well done. Table 3 is described as containing cost information. I did not find exact costs in any monetary unit on the table. Please explain.

3. Please add a paragraph in your discussion explaining the limitations of your study.

4. Please report if your group is planning on doing further studies on this topic. Did your results change your practice?

5. Please discuss the cost difference between bupivacaine and levobupivacaine. Do the potential benefits of the newer agents out weigh the added costs?

Thank you for your work.
Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:
Nothing to declare. No competing interests.