Reviewer's report

Title: Meta-analysis of randomized controlled trials on the efficacy of thoracic epidural anesthesia in preventing atrial fibrillation after coronary artery bypass grafting

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Reviewer: Fausto Biancari

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The authors reported the results of an interesting meta-analysis on the impact of thoracic epidural anesthesia in patients undergoing coronary artery bypass surgery. The topic of this meta-analysis is of clinical relevance and the benefit of thoracic epidural anesthesia in cardiac surgery is still controversial. Although this study includes only five studies with a relatively small number of patients, the results indicate that further studies on this issue are needed and may eventually demonstrate the efficacy of thoracic epidural anesthesia in these patients. I have a few comments:

1. The article is rather well written, but still requires minor linguistic revision.

2. The authors should rephrase a sentence regarding the use of random effects test in the Statistical analysis section.

3. Do the authors have any data regarding the potential complications related to thoracic epidural anesthesia in patients undergoing CABG? This is an importance issue, particularly in the light of need of further studies on this topic.

4. The authors should comment on the small size of the studies herein included. A sample size analysis could be informative to the readers (with the reported crude rates of 22.6% and 33.7%, there would be a need for a study including at least 257 patients per study group).

5. These studies included only patients undergoing elective surgery. This is a major limitation and the authors should discuss on this issue.

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Needs some language corrections before being published

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:
I declare that I have no competing interests