Reviewer’s report

Title: Influence of anesthesia methods on surgical outcomes and renal function in retrograde intrarenal stone surgery: a prospective, randomized controlled study

Version: 0 Date: 12 Aug 2019

Reviewer: Hossam El-Beheiry

Reviewer's report:

The manuscript analyzed the influence of anesthesia methods on surgical outcomes and renal function in retrograde intrarenal surgery (RIRS) in a prospective, randomized controlled study. The manuscript concluded RIRS under SA showed advantages in renal function change using Renogram at postoperative 3 months and in lower pain score on the first postoperative morning. Performance of operator under SA was worse than that under GA and significantly improved with sedation. RIRS under SA showed advantages in lower pain score at postoperative first day.

Page 3, lines 26-28: Clarify what is meant by normal can have renal dysfunction.

Page 3, lines 32-34: Provide necessary references that support the statement 'toxic effect of …'

Page 5, lines 19-27: Was there any reason not to use a laryngeal mask airway instead of endotracheal intubation in this cohort of patient?

Page 5, lines 36-42: What was the baricity of the local anesthetic used for spinal anesthesia? How abdominal circumflex and body mass index affected the doses of spinal anesthetics used?

Page 5, lines 51-53: What was the level of spinal blockade in this cohort of patients?

Page 6, line 4-7: State explicitly the primary and secondary outcomes of this study.

Page 6, lines 47-49: State the variables used to calculate the sample size.

Page 8, lines 50-56: Clarify the statement 'relative renal function'. Clarify what is meant by significant increase in relative renal function in the GA group more than the SA group while the previous sentence indicates that the SA group showed improvement more than GA group.
Indicate whether there was an association between the level of SA blockade and maneuverability, accessibility, and patient discomfort.

Mention the major complications that occurred under GA and SA.

Change 'patient controlled anesthesia' to 'patient controlled sedation'.

Clarify that references 24-26 were studies done in non-urologic surgeries.

Explain the reason for the results mentioned in these lines.

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

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

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

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 am able to assess the statistics

Quality of written English
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