

Peer Review File

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Reviewer A

Comment 1:

The manuscript has a logical flow from the introduction to conclusions. It effectively presents a clear objective of intraoperative ketamine usage and offers a detailed discussion of the identified studies. Even though the side effects of Ketamine intraoperatively do not seem to be more deleterious, I think it would be beneficial to have a brief paragraph on ketamine's most deleterious side effects in general. For example: Natteru PA, Jayaram S, Sanchez O, Leon K, Mishra A, Nobleza CO. Abdominal Compartment Syndrome with Super-K (Ketamine) for Super-R(efractory) Status Epilepticus: A Case Report. Clin EEG Neurosci. 2022 Oct 25;15500594221134920. doi: 10.1177/15500594221134920. Epub ahead of print. PMID: 36285375.

Overall, it is a well-written and informative piece that contributes to the understanding of intraoperative ketamine use in abdominal surgery.

Reply 1: An additional paragraph has been added to discuss ketamine's most deleterious effects

Changes in the text: In the side effects discussion section, page 13, lines 428-434 has been added to provide a brief paragraph on ketamines deleterious side effects in general,

Reviewer B

I read with interest the manuscript by Murcia et al. on the impact of intraoperative Ketamine on postoperative outcomes in abdominal surgery. The review is sound and well written. However, there are some issues that need to be addressed:

Comment 2:

- Lines 57-63. When discussing the effects of ketamine, authors should provide a summary of ketamine uses, such as cronic pain (doi: 10.3389/fpain.2023.1268985) delirium prevention (doi: 10.1186/s12871-023-02367-8) and refractory asthma (doi: 10.1007/s00228-022-03374-3). Please briefly discuss and add these 3 references.

Reply 2: A summary of ketamines uses and areas of study using the above mentioned studies has been added.

Changes in the text: Lines 57-63 (mentioned in comment) were revised on page 3-4, lines 57-71 and now includes the effects of ketamine along with its uses. The above

references were discussed and added to the references.

Comment 3:

- It is not clear whether you conducted a systematic review or a narrative one. In fact, from the methods section it seems that you followed some of the PRISMA guidelines (except perhaps the PROSPERO registration). Please explain.

Reply 3: Although we implemented certain systematic search principles, such as targeting adult patients with a specific focus on intraoperative use of ketamine and excluding descriptive commentaries to maintain focus on primary research, we did not follow a strict protocol as our intent was not to conduct a systematic analysis.

Changes in the text: In the methods section on page 5 on line 136, and page 6, lines 145 and 146, we added text to emphasize that this is a narrative review. Moreover, on page 6, line 151, we removed text that may indicate replicability such as in systematic reviews.

Comment 4:

- Please separate the results section, where authors should summarize the results of the included studies, from the Discussion, where those results are commented.

Reply 4: An additional section has been made to account for separation of results and discussion.

Changes in the text: In page 6, line 154, section 3 is now Results, and in page 10, line 350, a new section has been added that includes a separate Discussion section.

Comment 5:

- In Table 3, authors should provide the outcome studied by the included papers, and the main results reported, as well as the reference number in a separate column.

Reply 5: We added 3 more columns to include the main outcomes, the main results and the reference number.

Changes in the text: In page 19, line 574, the changes can be found in the table.

Comment 6:

- In the conclusions, I would suggest to focus on the key messages of this review, limiting them to the promising results coming from RCTs and the need for a systematic approach and a meta-analysis to summarize and confirm those results.

Reply 6: We revised to the conclusion section focus on the promising results of the RCTs and the need for meta-analysis.

Changes in the text: The conclusion section, section 5, lines 450-458, have been revised to focus on the promising results from RCTs, as well as a focus on the need for meta-analysis to reflect these changes.