

## Peer Review File

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### Reviewer Comments

#### Reviewer A

In their narrative review, Saxena et al summarized the current status of robotic surgery in pediatric patients. The presentation is very comprehensive and well structured. It provides a good overview of the current application of robotic procedures in pediatric surgery. It also becomes clear that robotic surgery is still an exception in this collective. In particular, the presentation of individual clinical pictures is very good. However, I do have a few recommendations that would make the job even better:

1. I recommend a PRISMA flow chart for a quick overview of the review process

Reply 1. Following the Reviewer's suggestion, we created Table 1, a PRISMA flow chart for a quick overview of the review process.

2. The work included should be briefly presented in one or more tables

Reply 2. Following the Reviewer's suggestion, we created Table 2 (characteristics of the enrolled studies) and Table 3 (summarizing the topics described in the enrolled studies).

3. According to point 2 or separately, the level of evidence of the included works should be presented

Reply 3. Following the Reviewer's suggestion, we created Table 2 (characteristics of the enrolled studies) and Table 3 (summarizing the topics described in the enrolled studies).

4. Perhaps the conclusion can be completed by presenting the core statements about the clinical picture in a table or box, for example

Reply 4. Since the manuscript is a narrative review, I would not advise a schematic table report for conclusions as it could compromise the narrative flow of the manuscript.

#### Reviewer B

The authors present a review article of pediatric robotic surgery. I have the following comments and questions:

1) Overall, excellent manuscript. This will be a timely publication as the field of robotic pediatric surgery is exploding.

Reply 1) I really appreciated your comment

2) There are several grammatical errors in the manuscript that need to be corrected. Several sentences are incorrect in terms of grammar and syntax.

Reply 2) The grammar and syntax of the manuscript have been revised (see text for

corrections).

3)What was the age cut off to be considered pediatrics in this review?

Reply 3) We specified the range of age of the patients considered in this review in the "material and methods" part (Pag. 4).

4)Line 342: It is unclear what condition/operation is being discussed here. This needs to be better explained.

Reply 4) We specified the pathological conditions and the surgical procedure described in the study cited. (Pag. 14)

5)Include a pie chart of total cases and what % are in the different categories in all the selected articles included in this review. for eg: if the total cases were 100 in all the combined articles chosen for this review, and 50% of cases were urology, 15% oncology.....

Reply 5) All the details were specified in Table 2 and Table 3, according to the Reviewer's question and according to the narrative core of the review. (Pag.5)

6)Include a table with all the articles chosen to be included in the review with number of cases, type of operation, complications, length of stay..... for each article. In the manuscripts current form it is unclear what knowledge can be extracted from each article included and how many patients are included in this review.

Reply 6) All the details were specified in Table 2 and Table 3, according to the Reviewer's question and according to the narrative core of the review. (Pag.5)

### **Reviewer C**

This manuscript analyzed an important new approach in the field of pediatric surgery. Even if well written, this manuscript seems to be more appropriate to a textbook, as it was designed as a book chapter.

Authors' analysis did not include costs and training analysis, that are considered key elements in pediatric robotic surgery field.

This study lacks originality when compared with the other 219 reviews in the same field in the current literature.

I suggest to rewrite the manuscript considering systematic reviews and meta-analyses (PRISMA) guidelines, adding tables to summarize authors' findings.

Reply: The objective of this narrative review was to describe the surgical fields of applicability of robotic pediatric surgery, focusing on evaluating all the surgical fields in which robotics can be a helpful tool and can be reported as an innovative technique with a rapid rise in these recent years. Moreover we evaluated those fields in which robotic surgery is obtaining above all the role of first surgical indication.

On purpose, in order to avoid losing the exact focus of the manuscript, no mention was made on costs and training analysis, arguments that are certainly important but

which would have diverted the attention from the main part of our work.

Following the Reviewer's suggestion, even if our manuscript is produced based on narrative review guidelines, in order to better outline the studies enrolled and the topics discussed, a Prisma flow chart was added (Table 1).

Table 2 and Table 3 were also added to clarify the characteristics of the studies enrolled in our narrative review.

#### Reviewer 4

1. why: Otolaryngologic, Cardiosurgical, 100 Anesthesiologic and Neurosurgical pediatric publications were excluded?

To make the contents of the paper clearer the explanation why or changing the title seems to make sense. Especially that, because of the criteria about 85% of finding articles were excluded.

Reply 1. On purpose Otolaryngologic, Cardiosurgical, Anesthesiologic, Neurosurgical pediatric publications were excluded from our narrative review because our goal was to outline a current picture of pediatric surgical applications with the robot-assisted technique, describing all the procedures carried out exclusively by pediatric surgeons. Anesthetic procedures, cardiac surgery, neurosurgery, etc. are performed by other specialists and not by pediatric surgeons.

2. There is no Result section

Reply 2. Results were depicted in the "Results" section. A Prisma Flow Chart and two tables were added in this paragraph in order to clarify the characteristics of the studies enrolled in this narrative review.

Being a narrative review and not a systematic review, the most developed part was the discussion, where detailed considerations were made based on the topics analyzed in the enrolled studies.