Peer Review File

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Review comments

Reviewer A

This paper was interesting to read, but I am surprised over a number of statements, especially using words like "superior" a number of times.

Let us be clear: The authors should focus on the learning curve (which is in the title). Not to exclaim the word "superior" without adequate data and references so many times. RARC is COMPARABLE in some of the outcomes with ORC, but certainly not "superior".

Some details:

1. In the Abstract we read:
"This suggests that a surgeon's experience positively influences LN yield, which has implications for accurate staging and better patient outcomes".

Comment: There is only one single published randomised trial comparing limited versus extended lymph node dissection in terms of improved survival. No difference. Analysis of retrospective data comparing extended lymph node dissection versus limited causes stage migration and Will Rogers phenomena, please read in following paper why retrospective analyses are unreliable to determine improved survival following extensive lymph node dissection in cystectomized MIBC-patients:

Suttmann H, Kamradt J, Lehmann J, Stöckle M.
Improving the prognosis of patients after radical cystectomy.
Part I: the role of lymph node dissection.
BJU Int. 2007 Dec;100(6): 1221-4.

Read the Suttman-paper once, twice and thrice, and you will discover that "the more nodes removed, the better" is not a scientific statement.

Note that the statement of the authors concerning postulated survival benefits, is repeated in some other places, as for instance in line 141 and forwards.
Lymph node dissection only serves the purpose of improved pN-staging. Suggestion: The text needs to be adjusted and upgraded in this aspect.

2. Bochner et al
"Randomized Trial Comparing Open Radical Cystectomy and Robot-assisted Laparoscopic Radical Cystectomy: Oncologic Outcomes" is quoted, as if that paper showed benefits of RARC versus ORC, but the outcomes were not so. The results in the article mainly showed no differences.

Suggestion: Please take that in consideration when rewriting the manuscript.

3. On the question of length of stay, the reference is Collins et al. Now some inside information:
(a) The hospital referred to usually send their RARC-patients very early to a unit OUTSIDE of the department called "Stockholms sjukhem" and do not register X and Y days as hospital days in the national register - thus cutting away a number of days from true hospital stay. This is a well known national fact.
(b) The hospital referred to has the highest re-admission incidence of cystectomy patients nationwide (a consequence of (a), of course). This is well known from national register data.

Suggestion: Find some other references for discussing the matter of hospital stay.

In conclusion: The authors seriously need to rewrite over-enthusiastic statements on the "superior RARC" as I mentioned above. Try to be more objective and less hyped in this matter. Focus on the true matter of the manuscript: The learning curve.

I am eager to read your next updated version of course.

Reply
Thank you for your comments. We have tried our best to focus on the learning curve and agree that the results are comparable.

1. **Thank you for pointing this out. The necessary changes have been made. Line 38 and Line 143**
2. **The results of the outcomes are comparable**
3. **Line 150 – Necessary changes done.**

Reviewer B

Robot-assisted radical cystectomy (RARC) is a minimally invasive surgical used to treat muscle invasive bladder cancer. In this review, operating times, blood loss, hospitalization, parameters such as positive margins and number of lymph nodes made it possible to estimate the indicative number of procedures for completing the learning curve. As expected, robotic procedures offer many advantages: surgeon comfort, less estimated blood loss, shorter hospital stay; costs of robotic surgery are higher than open techniques, but the latter requires longer hospitalization times. It is no wonder that shorter operative times, better oncological outcomes are observed after various procedures. Among the urinary derivations, the orthotopic diversion is much longer.

In discussion section the authors should debate if using stapler could be beneficial in terms of OT and learning curve (Robot-assisted radical cystectomy with intracorporeal reconstruction of urinary diversion by mechanical stapler: prospective evaluation of early and late complications. 10.3389/fsurg.2023.1157684).

Moreover the authors should evaluate the potential correlation of the longer hospitalization with higher rate of perioperative complications to understand whether the longer hospitalization times in

the first cases of RARC are due to post-operative complications or simply to the adoption of a precautionary strategy and observation. It would be interesting to verify how much the surgeon's experience on open and/or video laparoscopic procedures gives more advantages by approaching the robotic technique respectively,
(Robot-Assisted, Laparoscopic, and Open Radical Cystectomy: Pre-Operative Data of 1400 Patients From The Italian Radical Cystectomy Registry. doi: 10.3389/fonc.2022.895460.
Robotic-assisted, laparoscopic, and open radical cystectomy: surgical data of 1400 patients from The Italian Radical Cystectomy Registry on intraoperative outcomes. doi: 10.5173/ceju.2022.0284)

Finally number of cases needed for completing the learning curve was reported by the authors to be lower than in the literature (about 75 -130). In discussion section the authors should debate this result.
(Systematic Review: The Learning Curve for Robot-Assisted Radical Cystectomy-What Do We Know? doi: 10.1089/end.2021.0388;
Robotic radical cystectomy - more precision needed? doi: 10.1097/MOU.0000000000001072)

Reply

1. **Necessary additions done using this paper - Robot-assisted radical cystectomy with intracorporeal reconstruction of urinary diversion by mechanical stapler: prospective evaluation of early and late complications.**
2. **Additions and changes done as advised.**

Reviewer C

I would like to extend my congratulations to the authors for their thought-provoking review article, "The Learning Curve of Robotic Radical Cystectomy versus Open Radical Cystectomy." The selection of the learning curve as the central theme in the context of robotic surgery is undoubtedly a commendable choice. This theme holds immense significance in the evaluation of emerging techniques and has the potential to greatly facilitate the educational journey of aspiring surgeons.

The authors have embarked on an important endeavor by shedding light on the learning curve associated with robotic radical cystectomy compared to its open counterpart. This subject not only addresses a critical aspect of surgical proficiency but also contributes to the continuous enhancement of surgical techniques. The potential to improve the training and skill development of future surgeons is a fundamental advancement in the field of urology.

While the article presents valuable insights, I must express my concern regarding the methodology section. The methodology, particularly the process of literature search and article retrieval, lacks the necessary level of detail that is expected in rigorous scientific research. Given the importance of a thorough literature review to support the findings and conclusions, I would strongly recommend a more comprehensive approach to this aspect of the study.

Considering the potential impact of the research and the invaluable knowledge it could offer to the medical community, I believe that the paper could be better positioned for publication with a more

refined methodology. If the journal provides a designated review section, it might be worthwhile to consider submitting the paper for that section after undergoing a significant revision of the methodology. This approach would likely strengthen the paper's overall contribution and align it more closely with the journal's standards for original research.

Reply

Certain additions were made to the literature search, and necessary additions done.