

Peer Review File

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Review Comments

Reviewer A

The authors of this article presented a retrospective analysis of 97 h-RARP surgeries performed with the HSRS robot introduced in 2021 in their Center. The article is well-written and interesting; however, some critical issues exist.

Comment 1: It should be specified whether all patients operated on with h-RARP in that period were involved in the study or whether there were selection criteria for which some patients were excluded.

Reply 1: All patients were included. We have revised the text (see Page 8, line 115-117).

Comment 2: It would be helpful if the data reported on Surgical outcomes were compared with data collected in a homogeneous and comparable group of patients undergoing d-RARP (also to be reported in the tables). In the Discussion, this comparison is mentioned claiming that there are no significant differences with patients undergoing d-RARP however, no ORs are reported.

Reply 2: D-RARP data was added to Tables 1 and 2 and statistically compared with h-RARP data. Table 3 was considered unnecessary and was deleted. Perioperative complication rates have been added to Table 2 (see Table 1, 2). We added comments about these comparisons to abstract, methods, results, and discussion (see Page 3, line 44-45; Page 9, line 140-143; Page 11, line 162-166 and 168-177; Page 13, line 195-200).

Comment 3: It would be better to specify the time of onset of postoperative complications, was only the postoperative hospital stay considered or 30-90 days after surgery?

Reply 3: Perioperative complications were those that occurred within 90 days after surgery. We have revised the text (see Page 8, line 122-124).

Comment 4: It would be appreciated if more photos were included especially of the Docking-free design which is the most innovative element of this type of robot compared to the da Vinci.

Reply 4: Figure 4 shows the difference between hinotoriTM and da Vinci (see Figure 4).

Reviewer B

I think it is a very interesting theme.

Comment : I have almost good understanding of the topic, but I wonder what percentage of "most" RARPs are done using hinotori. Is there any difference in patient's condition between hinotori and davinci selection?

Reply: There were no criteria for which robot system to use. We selected a robot system that could be used at that time (Page 8, line 118-119).

Reviewer C

This is an article on RARP using the new robotic surgery system “Hinotori”. This is an important paper reporting the safety of introducing a new robot system in RARP and the seamless learning curve between the pre-existing da Vinci system and the new system. I would like to ask the authors to revise the manuscript as follows.

Comment 1: Line 120: The position of the foot unit is different from the da Vinci system. Further, the difference in the clutch system (hand clutch in da Vinci Xi system) could affect the surgeons’ performance. I recommend that the author describe these small differences here in the Method.

Reply 1: We added a comment about the difference in the clutch system to the discussion (see Page 14, line 209-211).

Comment 2: Line 126: Please describe which version of the da Vinci system you have used since 2017.

Reply 2: We added comments (see Page 8, line 117-118).

Comment 3: Line 155 and 183: As the authors describe in the Conclusion “Our results show that surgical outcomes of h-RARP are comparable to those of d-RARP during the initial experience of clinical application.”, the importance of this manuscript is the safety and the comparable results of h-RARP compared with d-RARP. However, the information on d-RARP is not shown in this manuscript. Please provide the patient characteristics, surgical results, and complications in Tables 1-3.

Reply 3: D-RARP data was added to Tables 1 and 2 and statistically compared with h-RARP data. Table 3 was considered unnecessary and was deleted. Perioperative complication rates have been added to Table 2 (see Table 1, 2). We added comments about these comparisons to abstract, methods, results, and discussion (see Page 3, line 44-45; Page 9, line 140-143; Page 11, line 162-166 and 168-

177; Page 13, line 195-200).

Comment 4: Line 190-195: Although the concept of Hinotori is similar to that of da Vinci, the way to align the pivot of the robotic arm is completely different. Please briefly describe the way of setting pivot in the h-RARP.

Reply 4: The pivot of robotic arm is performed when docking (see Page 14, line 214-216).

Comment 5: Line 197: I feel this sentence is misleading. Do surgeons feel the forceps floating??

Reply 5: This sentence has been removed as it may have caused misunderstanding to readers (see Page 14, line 214).

Comment 6: Line 222: The manuscript is suddenly difficult to understand in the Conclusion section. Please check and revise the manuscript.

Reply 6: We revised the conclusion section (see Page 16, line 243-247).

Comment 7: Table 2: 18(31.0) and 17(47.2) are accidentally misaligned in my PDF file. Please check.

Reply 7: We have corrected the part you pointed out (see Table 2).

Comment 8: Table 3: Positive surgical margin of 58% in the T1-2 tumor in Surgeon 2 (Later group) is relatively high. Any reason for this? If this is due to h-RARP, the authors should discuss this issue in the manuscript.

Reply 8: We think that the number of patients involved is small and that there appears to be a difference. No statistically significant difference was observed.

Reviewer D

Comment: Congratulations to the authors. This paper represents very interesting casuistics of a specific and little-known robotic platform. The article is interesting but would make more comparisons with other new robotic platforms and should be reviewed by a native English speaker experienced in academic language.

Reply: This article has been reviewed by a native English speaker experienced in academic language.

Reviewer E

The paper is well written, with the exception of minor linguistic problems (some sentences need to be rephrased as indicated below).

Although the study design is simple and retrospective, it effectively achieves the goal of demonstrating how the new Hinotori surgical robot system (HSRS) can be introduced serenely into daily clinical practice for performing radical prostatectomy.

However, in the discussion the authors stated that "the surgical outcomes of Hinotori-RARP were comparable to those of DaVinci-RARP": how could they say this, without including patients treated with DaVinci in their study?. They also did not refer to any other DaVinci-RARP series or meta-analyses for outcome comparison purposes.

I suggest a minor revision as follows:

Comment 1: sentence rephrasing:

- Abstract (Line 56-58)

Reply: We have modified our text (see Page 4, line 61-63).

- Introduction (Line 101-103)

Reply: We have modified our text (see Page 7, line 106-108).

Comment 2: remove non-evidence-based comparative conclusions with DaVinci-RARP or modify the study including DaVinci-treated patients for outcome comparison or compare Hinotori-RARP results with DaVinci-RARP results from systematic reviews and meta-analyses of the literature.

Reply 2: D-RARP data was added to Tables 1 and 2 and statistically compared with h-RARP data. Table 3 was considered unnecessary and was deleted. Perioperative complication rates have been added to Table 2 (see Table 1, 2). We added comments about these comparisons to abstract, methods, results, and discussion (see Page 3, line 44-45; Page 9, line 140-143; Page 11, line 162-166 and 168-177; Page 13, line 195-200).

Reviewer F

In this retrospective study, authors reported their experience with Hinotori surgical robot system. paper is well written and the reading is smooth.

Comment 1: Discussion can be more accurate in the description of the strengths and limitations of this robot.

For example:

In this article, the 2 surgeons had extensive experience in RALP

The learning curve for novel surgeons can be described in the future:

doi: 10.5173/ceju.2023.260. Epub 2023 Mar 3. PMID: 37064261; PMCID: PMC10091888.

Did authors perform LND with Hinotori in their experience? Please report in the discussion.

Reply 1: Trainee surgeons' learning curves was mentioned with additional references (see Page 15, line 229-230).

We mentioned pelvic lymphadenectomy with additional references (see Page 13, line 200-202).

Comment 2: Line 103-104 should go in the materials and methods section

We present this article in accordance with the STROBE reporting checklist.

Cockpit time seems statistically different for surgeon 1 but not for surgeon 2, please explain.

Reply 2: The authors instructions state that the reporting checklist should be mentioned at the end of the introduction.

Based on previous literature, the learning curve is thought to reach a plateau after 50-100 cases. Surgeon 2 is thought to have already reached plateau with d-RARP (see Page 14-15, line 220-226).

Reviewer G

Comment 1: This is a valuable work and a well-written paper. There is one main concern that makes me choose "major revision" for this manuscript.

Main concern: In the discussion section lines 183-185 (as well as in conclusion and abstract) it has been mentioned that h-RARP is comparable to d-RARP while no evidence is provided. The manuscript does not report any data related to d-RARP and there is no statistical analysis to compare h-RARP with d-RARP.

Reply 1: D-RARP data was added to Tables 1 and 2 and statistically compared with h-RARP data. Table 3 was considered unnecessary and was deleted. Perioperative complication rates have been added to Table 2 (see Table 1, 2). We added comments about these comparisons to abstract, methods, results, and discussion (see Page 3, line 44-45; Page 9, line 140-143; Page 11, line 162-166 and 168-177; Page 13, line 195-200).

Comment 2: Line 101-103 needs to be reworded/reviewed.

Reply 2: We have modified our text (see Page 7, line 106-108).

Comment 3: Were there any interesting results or anything different related to the other three surgeons' who also performed h-RARPs (their data have not been reported in this manuscript)? You do not necessarily need to report their data, but you could clarify if you looked at their data and if

yes, was there anything to mention here?

Reply 3: The number of cases of h-RARP was still small and nothing noteworthy.

Comment 4: Line 149. What does PSA stand for? You have it in the table footnotes but not in the body of the manuscript.

Reply 4: Since the results have been revised, sentences containing PSA have been deleted. (see page 11, line 161-166).

Comment 5: line 172. Please, use “group; however, there” instead of “group, however, there”

Reply 5: We have modified our text as advised (see Page 12, line 184).

Comment 6: line 176. “in any” instead of “in all”.

Reply 6: We have modified our text as advised (see Page 12, line 188).

Comment 7: line 206 mentions “several studies” while only two references have been cited.

Reply 7: We Added references (see Page 14, line 223-224; Page 20, line 299-301).

Comment 8: Please, mention in the limitations that your results are based on data from only two surgeons.

Reply 8: We added limitations (see Page 15, line 238-240).

Comment 9: figure 2 (A). It would be great to illustrate the placement of ports so that they are distinguishable in black and white prints (a suggestion).

Reply 9: We have corrected the part you pointed out (see Figure 2).

Comment 10: Table 2. It seems that you need to align 18(31.0) and 17 (47.2) with “With pT2” and “With pT3”. It is one line up now. Right?

Reply 10: We have corrected the part you pointed out (see Table 2).

Comment 11: Table 3. Do you mean “grades 0-2” by “Any grade”? I think “Any grade” could be confusing.

Reply 11: As mentioned above, Table 3 has been deleted.