



Re: Lloyd P, Hong A, Furrer MA, et al. A comparative study of perioperative outcomes for 100 consecutive post-chemotherapy and primary robot assisted and open retroperitoneal lymph node dissections. *World J Urol.* 2021; DOI: 10.1007/s00345-021-03832-0

Alireza Ghoreifi¹ · Hooman Djaladat¹

Received: 11 December 2021 / Accepted: 13 December 2021 / Published online: 22 January 2022
© The Author(s), under exclusive licence to Springer-Verlag GmbH Germany, part of Springer Nature 2021

Dear Editor

We read with great interest the article by Llod et al. who reported the perioperative outcomes of 28 robotic vs. 72 open retroperitoneal lymph node dissections (RPLND), done by a single surgeon. They also performed a sub-cohort analysis on patients in the robotic group ($n=21$) and matched open group ($n=18$) who had previous chemotherapy. They found that robotic RPLND is associated with improved perioperative outcomes, including blood loss, operative time, and length of stay with no difference in complication rates compared to the matched cohort of open RPLND. These improved perioperative outcomes were also seen in the post-chemotherapy setting.

We applaud the authors' effort to perform this study. However, there are some points in the paper that would worth highlighting:

- (1) The number in each group is small and makes it “weak powered” for any interpretation. Such an effort might have been more meaningful through larger sample size/multi-institutional study.
- (2) There is a considerable selection bias, including learning curve, type of cases, dissection template, and surgical approach. Given such biases in this study, comparing these two approaches is like comparing apples and oranges.

- (3) It seems that for right sided tumor with evident metastasis in inter-aortocaval area (pre- and post-chemotherapy), a modified template RPLND is performed, while the literature including guideline is more in favor of bilateral template RPLND in these cases [1].
- (4) An ejaculation rate (or possibly retrograde ejaculation) is different from most of body of literature [2, 3]. The authors reported that 30/72 open RPLND vs. 0/28 robotic RPLND had an ejaculation. Although higher percent of non-nerve sparing is anticipated in post-chemotherapy setting, dissociation with robotic arm data is uncertain.
- (5) The outcomes of interest, such as operative time in the robotic group (150 min) or length of stay in open approach (5 days), are not compatible with the experienced high-volume centers [4, 5]. With extensive experience on both robotic and open surgery in metastatic testicular cancer, we believe that operative time (given the whole set-up) might be longer in the robotic approach. Given lymph node yield, operative time, and more comprehensive surgery (bilateral template) proposed for open cases in this series, it is almost impractical to follow the conclusions of this study.

In conclusion, we acknowledge that there is a lack of high-level evidence in the urology literature regarding the outcomes of robotic post-chemotherapy RPLND. Larger sample size and/or multi-institutional studies with longer follow-ups are needed to delineate the perioperative as well as long-term outcomes of this approach.

This comment refers to the article available online at <https://doi.org/10.1007/s00345-021-03832-0>.

✉ Hooman Djaladat
djaladat@med.usc.edu

¹ Institute of Urology, Norris Comprehensive Cancer Center, University of Southern California, 1441 Eastlake Ave. Suite 7416, Los Angeles, CA 90089, USA

Author contributions AG: manuscript writing. HD: manuscript editing and supervision.

Declarations

Conflict of interest The authors declare that they have no conflict of interest.

Research involving human participants and/or animals Not applicable to this article.

Informed consent Not applicable to this article.

References

1. Albers P, Albrecht W, Algaba F et al (2015) Guidelines on testicular cancer: 2015 update. *Eur Urol* 68(6):1054–1068. <https://doi.org/10.1016/j.eururo.2015.07.044>
2. Abdul-Muhsin H, Rocco N, Navaratnam A et al (2021) Outcomes of post-chemotherapy robot-assisted retroperitoneal lymph node dissection in testicular cancer: multi-institutional study. *World J Urol* 39(10):3833–3838. <https://doi.org/10.1007/s00345-021-03712-7>
3. Pettus JA, Carver BS, Masterson T, Stasi J, Sheinfeld J (2009) Preservation of ejaculation in patients undergoing nerve-sparing postchemotherapy retroperitoneal lymph node dissection for metastatic testicular cancer. *Urology* 73(2):328–332. <https://doi.org/10.1016/j.urology.2008.08.501>
4. Ghoreifi A, Mitra AP, Baky F et al (2021) PD53-06 Robotic post-chemotherapy retroperitoneal lymph node dissection for testicular cancer: a multicenter collaborative study. *J Urol* 206(Suppl 3):e918–e918. <https://doi.org/10.1097/JU.0000000000002080.06>
5. Ghodoussipour S, Daneshmand S (2019) Postchemotherapy resection of residual mass in nonseminomatous germ cell tumor. *Urol Clin North Am* 46(3):389–398. <https://doi.org/10.1016/j.ucl.2019.04.004>

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.