



European Association of Urology



Letter to the Editor

Re: Bernard H. Bochner, Guido Dalbagni, Karim H. Marzouk, et al. Randomized Trial Comparing Open Radical Cystectomy and Robot-assisted Laparoscopic Radical Cystectomy: Oncologic Outcomes. Eur Urol 2018;74:465–71

Can the Pattern of Cancer Recurrence Truly be Assigned to the Surgical Modality?

We read with great interest the paper by Bochner et al. [1] on oncologic outcomes from a randomized trial comparing open radical cystectomy (ORC) and robot-assisted laparoscopic radical cystectomy (RARC).

Patients with bladder cancer (BC) stage Ta-T3/N0-3/M0 were randomized to undergo ORC or RARC and the primary endpoint was a comparison of perioperative complications between the surgical modalities [2]. However, the secondary endpoint, published in the most recent paper, was a comparison of cancer outcomes, including recurrence-free survival, overall survival, and patterns of first recurrence.

The authors demonstrated similar recurrence-free and BC-specific survival between the robotic and open arms over median follow-up approaching 5 yr. The results were similar for risk estimates of all-cause mortality after surgery in both groups and the risk of recurrence was not significantly different.

Interestingly, in addition to the above-mentioned results, the authors describe a different pattern of first recurrence between ORC and RARC. Although they reported that the study was not designed to evaluate patterns of first recurrence and that this evaluation was unplanned, they suggest that patients undergoing RARC are potentially prone to more local/regional (abdominal/pelvic) recurrences. These differences, however, did not reach statistical significance. When the pelvic and abdominal recurrences were combined into a single group representing local/regional recurrence, the ORC group showed significantly less local/regional recurrence compared to the RARC group.

The rationale behind this suggested difference in patterns of first recurrence is still unclear. The two major differences between ORC and RARC are the positioning of the patient (Trendelenburg) and the pneumoperitoneum

required during robot-assisted surgery. One might suggest that these factors, mainly in long intracorporeal procedures, could lead to a higher rate of locoregional and abdominal/peritoneal recurrences.

Prompted by the results published by Bochner et al, we evaluated our series of 235 BC patients undergoing RARC with intracorporeal urinary deviation (iRARC) between 2010 and 2018 performed by three urologic surgeons in a single center. In a group consisting of 89 patients (46.8%) with T3/T4 disease over median follow-up of 1.6 yr (interquartile range 0.6–3.6), 62 patients (26.4%) experienced a total of 96 recurrences. We found only 11 (11.5%) local/regional recurrences, including two bowel recurrences and one peritoneal recurrence. All these patients had a stage T3b or T4 disease.

Since our data are in conflict with the recurrence pattern reported by Bochner et al, this suggests that recurrence patterns might be dependent on tumor stage rather than on the surgical modality. In our opinion, and strengthened by our data, there is no reason to suggest that (i) RARC is associated with a higher chance of developing locoregional recurrences. Nonetheless, it will be important to evaluate this possibility in future comparative and prospective RARC studies.

Conflicts of interest: The authors have nothing to disclose.

References

- [1] Bochner BH, Dalbagni G, Marzouk KH, et al. Randomized trial comparing open radical cystectomy and robot-assisted laparoscopic radical cystectomy: oncologic outcomes. *Eur Urol* 2018;74:465–71.
- [2] Bochner BH, Dalbagni G, Sjoberg DD, et al. Comparing open radical cystectomy and robot-assisted laparoscopic radical cystectomy: a randomized clinical trial. *Eur Urol* 2015;67:1042–50.

Siebre Dijkstra*

Carl J. Wijnburg

Department of Urology, Rijnstate Hospital, Arnhem, The Netherlands

*Corresponding author. Department of Urology, Rijnstate Hospital Arnhem, Wagnerstraat 55, Arnhem, The Netherlands.
E-mail address: sdijkstra@rijnstate.nl (S. Dijkstra).

January 22, 2019

