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European Association of Urology

Letter to the Editor

Re: Dipen J. Parekh, Isidinha M. Reis, Erik P. Castle, et al. Robot-assisted Radical Cystectomy Versus Open Radical Cystectomy in Patients with Bladder Cancer (RAZOR): An Open-label, Randomised, Phase 3, Non-inferiority Trial. Lancet 2018;391:2525–36

Blood Loss in Robot-assisted Radical Cystectomy: An Important Patient Benefit

We read with interest the report by Parekh and colleagues [1] on an open-label, randomised, noninferiority phase 3 trial comparing robot-assisted radical cystectomy with open radical cystectomy in biopsy-confirmed T1–4 N0–1 M0 bladder cancer and refractory carcinoma in situ. Patients were block randomised to receive either robot-assisted radical cystectomy or open radical cystectomy with extracorporeal urinary diversion. The primary outcome observed was progression free survival at 2 yr after surgery. Secondary outcomes observed included blood loss, transfusion requirement, surgical margin status, lymph nodes resected, operating time, length of stay, 90-d complications, and quality-of-life outcomes at 3 and 6 mo postoperatively.

Importantly, the authors found that estimated blood loss was significantly lower for robot-assisted cystectomy (mean 300 ml) than for open surgery (mean 700 ml). In addition, the transfusion requirement was significantly lower for robot-assisted surgery, with only 24% of cases requiring transfusion compared with 45% for open cystectomy.

Blood transfusion is common among cystectomy patients [2] and is associated with worse surgical outcomes [3]. Surgical blood loss may be associated with poor surgical skill [4] and recurrence may be directly associated with transfusion-related immunosuppression [2].

With increasing recognition of the importance of patient blood management and the avoidance of blood transfusion, does this trial indicate an advantage that may indeed have a patient benefit?

Conflicts of interest: The author has nothing to disclose.

References

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September 7, 2018

