64

Combined minimal invasive surgery for bladder cancer and another intra-abdominal malignancy: A single centre experience

European Urology Supplements 2019;18(3):e2500

Vos N. , Fossion L.M.C.L.

Maxima Medical Centre, Dept. of Urology, Veldhoven, The Netherlands

Introduction & Objectives: Radical cystectomy is the standard of care treatment for patients with muscle-invasive, high-grade or recurrent non-muscle-invasive bladder cancer. A previous study in our centre showed significant benefits from laparoscopic radical cystectomy (LRC) compared to the open approach. When a second intra-abdominal tumour is present in patients with bladder cancer, they may be candidates for a simultaneous surgical procedure for both malignancies. In the present clinical study, we report on our experience with combined laparoscopic interventions, and evaluate the feasibility and safety of this surgical option.

Materials & Methods: Between January 2008 and December 2018, a total of 242 patients underwent LRC with pelvic lymph node dissection (LPLND) at our institution. A majority of 234 single LRCs were carried out for the treatment of bladder cancer only, while 8 patients underwent LRC combined with another laparoscopic procedure for treating a coexisting intra-abdominal pathology. These combined interventions included nephrectomy, nephro-ureterectomy, ileocaecal resection, and sigmoidectomy. Patient characteristics, perioperative data, and postoperative complications were prospectively gathered and retrospectively analysed. The statistical analysis of this single surgeon study was performed with SPSS version 25. The means of both groups were evaluated using the independent sample T-test, the medians were analysed using the Mann-Whitney U-test, and the Pearson Chi-Square test was used to evaluate the independence of both groups. The level of statistical significance was set at 0.05.

Results: When comparing single versus combined LRC, both groups had similar gender distribution, age, body mass index, smoking behaviour, Charlson Comorbidity Index score, and clinical stage. The laparoscopic approach was technically successful in all 8 cases, without the need for open conversion. No major intraoperative complications were observed during the combined procedures. No statistically significant differences were found in median estimated blood loss (350 versus 650 ml; $p = 0.62$) or length of hospital stay (12 versus 12 days; $p = 0.88$). However, a difference was observed in median operating time (305 versus 389 min; $p = 0.01$). Postoperative complication rate within the first 3 months after the operation, according to Clavien-Dindo classification, did not differ between both groups ($p = 0.75$).

Conclusions: Our results suggest that combined minimal invasive surgery for treating two different coexisting intra-abdominal malignancies is a technically feasible and safe option. It has the advantages of single anesthesia and hospital admission, without increasing postoperative morbidity. Patient selection remains the most important factor to minimize complications and optimize overall outcome.