LAPAROSCOPIC RADICAL CYSTECTOMY AND EXTRACORPOREAL URINARY DIVERSION: A SINGLE CENTER EXPERIENCE OF 47 CASES
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Introduction The surgical management of bladder cancer has long been focused on minimally invasive approaches. With the advent of laparoscopy, a new surgical option for radical cystectomy became available.

Purpose: To report our experience with laparoscopic radical cystectomy and extracorporeal urinary diversion for high-grade muscle invasive bladder cancer in a consecutive series of 47 patients.

Materials and Methods from May 2007 to July 2010, 47 patients (41 men and 6 women; mean age 64.8±9.1 years) with bladder cancer underwent laparoscopic radical cystectomy and bilateral pelvic lymph node dissection at our institution. Urinary diversion was done extracorporeally through the specimen extraction incision.

Results 47 radical cystectomies with 40 ileal conduits and 7 studer-limb neobladders were performed. There were no conversions to an open technique. The mean operating time was 462.6±94.4 minutes, and the mean blood loss was 507.3±102.7 mL. 2 patients (4.2%) had intraoperative complications. One was a rectal wall tear which was managed laparoscopically with completion of the procedure and another one was a necrosis of ileal conduit, so secondary conduit was needed. 10 patients (21.3%) presented postoperative complications (small bowel obstruction; 1 patient, conduit-ureter anastomosis site leakage/stricture; 1/4 patients, respectively, paralytic ileus; 4 patients). The mean hospital stay was 23.2±16.4 days, and mean time to drain removal was 14.3±7.1 days. Histologic examination showed organ-confined tumors (Stage pT1/pT2/pT3a) in 34 patients (72.1%) and extravesical disease (pT3b/pT4) in 13 (27.9%). Pelvic lymph node involvement appeared in 13 cases (27.9%). The mean number of nodes removed was 14.6±8.2. At a mean follow-up period of 325.8±258.5 days, 42 patients were alive with no evidence of disease (disease-free survival rate 89.4%).

Conclusion Despite technical difficulties, laparoscopic radical cystectomy with extracorporeal urinary diversion and pelvic lymph node dissection is a safe, feasible, and effective alternative to open radical cystectomy.