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Analysis of radical cystectomy and urinary diversion complications with the Clavien classification system in an Italian real life cohort

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Abstract

Introduction: Standardized methods of reporting complications after radical cystectomy (RC) and urinary diversions (UD) are necessary to evaluate the morbidity associated with this operation to evaluate the modified Clavien classification system (CCS) in grading perioperative complications of RC and UD in a real life cohort of patients with bladder cancer.

Materials and methods: A consecutive series of patients treated with RC and UD from April 2011 to March 2012 at 19 centers in Italy was evaluated. Complications were recorded according to the modified CCS. Results were presented as complication rates per grade. Univariate and binary logistic regression analysis were used for statistical analysis.

Results: Results and limitations: 467 patients were enrolled. Median age was 70 years (range 35–89). UD consisted in orthotopic neobladder in 112 patients, ileal conduit in 217 patients and cutaneous ureterostomy in 138 patients. 415 complications were observed in 302 patients and were classified as Clavien type I (109 patients) or II (220 patients); Clavien type IIIa (45 patients), IIIb (22 patients); IV (11 patients) and V (8 patients). Patients with cutaneous ureterostomy presented a lower rate (8%) of CCS type \geq IIIa (p = 0.03). A longer operative time was an independent risk factor of CCS \geq III (OR: 1.005; CI: 1.002–1.007 per minute; p = 0.0001).

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