

## COMPLICATIONS AND QUALITY OF LIFE AFTER RADICAL CYSTECTOMY AND URINARY DIVERSION

### Hypothesis / aims of study

Bladder cancer is a disease which plays a very important role in urological practice. The objective of this study was twofold:  
 1. To analyze medium term morbidity and mortality rates in a retrospective cohort of patients who underwent radical cystectomy and ileal conduit or Vescica Ileale Padovana (VIP) neobladder.  
 2. To assess the impact of these diversions on patient related quality of life (HR-QoL) using both validated and not validated questionnaires

### Study design, materials and methods

**METHODS:** In order to perform a systematic collection of complications, early and late complications were recorded according to the Clavien classification system, following the Martin criteria. Patient HR-QoL was assessed using phone administered questionnaires (EORTC QOL C-30, EORTC BLM-30, STOMA QOL; IOB-PRO). All the outcomes from the study were evaluated by considering the following variables: year in which the operation was performed, patient's age at surgery, pathological stage (TNM, type of urinary diversion and gender).

### Results

**RESULTS:** From January 2002 to 30 June 2012 we identified 145 patients treated with radical cystectomy and urinary diversion. At multivariate analysis, the year of intervention  $\leq 2005$ , age  $> 65$  years,  $p > 2$ , the presence of the ileal conduit, and the male gender were independent predictors of mortality.

Concerning the complications, none of the evaluated variables was statistically significant. Patients with complications showed a significantly worse HR-QoL on the following domains: EORTC QOL BLM30 Concerns Future [33.33 (0.00 to 66.67) vs 0.00 (0.00 to 33.33),  $p = 0.02$ ]; EORTC QOL-30 Physics C [80.00 (60.00 to 100.00) vs. 96.67 (86.67 to 100.00),  $p = 0.05$ ]; EORTC QOL C-30 Emotional [83.33 (58.33 to 100.00) vs. 100.00 (75.00 to 100.00,  $p = 0.020$ ]; EORTC QOL C-30 Global [50.00 (33.33 to 83.33) vs 83.33 (50.00 to 83.33),  $p = 0.049$ ].

The HR-QoL was significantly better in patients with VIP as regards the following domains: EORTC QOL C-30 Physics (F) [100.00 (93.33 to 100.00) vs. 80.00 (60.00 to 93.33),  $p = 0.000$ ]; EORTC QOL C-30 Role (R) [100.00 (79.17 to 100.00) vs. 83.33 (58.33 to 100.00),  $p = 0.038$ ]; EORTC Global QOL C-30 [83.33 (50.00 to 83.33) vs. 50.00 (29.17 to 83.33),  $p = 0.026$ ].

### Interpretation of results

**CONCLUSIONS:** Despite the limitation of the study due to its retrospective design, the comparison between the urinary diversion showed an advantage of the VIP neobladder in terms of HR-QoL. We need further randomized controlled clinical trials, in order to support the arguments raised in favour of the VIP.

### Concluding message

Patients undergoing radical cystectomy and VIP might have an advantage in terms of HR-QoL compared to those undergoing ileal conduit.

### Disclosures

**Funding:** none **Clinical Trial:** No **Subjects:** HUMAN **Ethics Committee:** University of Verona **Helsinki:** Yes **Informed Consent:** Yes