AB054. An improved technique for bladder cancer: pure laparoscopic radical cystectomy with orthotopic U-shape ileal neobladder using titanium staples

Shuai Wang, Xiaolong Qi, Feng Liu, Min Zheng, Dahong Zhang

Department of Urology, Affiliated Zhejiang Provincial People's Hospital, School of Medicine, Zhejiang University, Hangzhou 310014, China

Objective: To report our experience with an improved technique of laparoscopic radical cystectomy (LRC) and orthotopic ileal neobladder reconstruction, evaluating the perioperative and pathological outcomes.
Methods: We retrospectively reviewed the data of 56 cases who underwent radical cystoprostatectomy followed by construction of an orthotopic U-shaped ileal neobladder between August 2010 and December 2014. These data include intraoperative data, early and long-term postoperative complications, neobladder function, urinary continence and oncologic results. Also the key innovative procedure was introduced with details.
Results: The median time of the overall procedure was 212 min. The median estimated blood loss was 171 mL. The median hospitalization time after the operation was 21 days. Complications included two cases of unilateral ureter-pouch anastomotic strictures, one case of bilateral ureteral stricture, three cases of vesicourethral anastomotic strictures and three cases of vesicourethral leakage. The mean maximum pouch capacity was 446±32 mL, and pouch pressure at capacity was 18.1±2.6 cmH_2O. The Q_{max} was 14±1.2 mL/s, and the mean post-void residual was 25±10 mL. There were nine cases of night-time incontinence at 3 months post-operatively. Negative surgical margins of the bladder specimens were achieved in all patients. During a follow-up period of 3 to 44 months (average 32.6 months), local recurrence was found in two patients and distant metastasis was occurred in another three patients.
Conclusions: Our preliminary experience showed that pure LRC with non-absorbable titanium staples assisted orthotopic U-shape ileal neobladder reconstruction is feasible based on perioperative data and oncologic features.
Keywords: Pure laparoscopy; bladder cancer; radical cystectomy; orthotopic ileal neobladder

doi: 10.3978/j.issn.2223-4683.2015.s054

Cite this abstract as: Wang S, Qi X, Liu F, Zheng M, Zhang D. An improved technique for bladder cancer: pure laparoscopic radical cystectomy with orthotopic U-shape ileal neobladder using titanium staples. Transl Androl Urol 2015;4(S1):AB054. doi: 10.3978/j.issn.2223-4683.2015.s054

AB055. Work capacity of the bladder during voiding: a novel method to evaluate bladder contractile function and bladder outlet obstruction

Ning Liu, Li-Bo Man, Feng He

Department of Urology, Beijing Jishuitan Hospital, Beijing 100035, China

Background: Work in voiding (WIV) of the bladder may be used to evaluate bladder status throughout urination, not just at a single time point. Few studies, however, have assessed WIV due to the complexity of the calculations. We have developed a method of calculating work capacity of the bladder while voiding and analyzed the associations of bladder work parameters with bladder contractile function and bladder outlet obstruction (BOO).
Methods: The study retrospectively evaluated 160 males, aged >40 years and with a detrusor pressure at maximal flow rate ($P_{det}Q_{max}$) of ≥40 cmH_2O, who underwent urodynamic testing. WIV was calculated using the bladder power integration method; WIV per second (WIV/t) and WIV per liter urine voided (WIV/v) were also calculated. The relationships between these work capacity parameters and $P_{det}Q_{max}$ and AG number were determined using linear-

by-linear association tests, and relationships between work capacity parameters and BOO grade were investigated using Spearman's association test.

Results: Mean WIV was 1.15±0.78 J, mean WIV/t was 22.95±14.45 milliWatt, and mean WIV/v was 5.59±2.32 J/L. WIV/v showed significant positive associations with $P_{det}Q_{max}$ (r=0.845, P=0.000), AG number (r=0.814, P=0.000), and Schafer class (r=0.726, P=0.000). Conversely, WIV and WIV/t showed no associations with $P_{det}Q_{max}$ or AG number. In patients with BOO (Schafer class > II), WIV/v correlated positively with increasing BOO grade.

Conclusions: WIV can be calculated from simple urodynamic parameters using the bladder power integration method. WIV/v may be a marker of both bladder contractile function and BOO.

Keywords: Bladder voiding; contractile function; bladder obstruction

doi: 10.3978/j.issn.2223-4683.2015.s055

Cite this abstract as: Liu N, Man LB, He F. Work capacity of the bladder during voiding: a novel method to evaluate bladder contractile function and bladder outlet obstruction. Transl Androl Urol 2015;4(S1):AB055. doi: 10.3978/j.issn.2223-4683.2015.s055

AB056. The use of multi-endoscopic technique combined with cryoscalpel and 2 micron continuous wave laser in treating male urethra stricture

Haibo Xia

Department of Urology, The Affiliated Hospital of Chifeng College, Chifeng 024000, China

Objective: To discuss the safety and clinical value of multi-endoscopic technique combined with cryoscalpel and 2 micron continuous wave laser in treating male urethra stricture.

Methods: We retrospectively analyzed the clinical effects of multi-endoscopic technique combined with cryoscalpel and 2 micron continuous wave laser in the treatment of 32 cases of male urethra stricture. Patients were followed up 6-24 months after operation and the effects were observed.

Results: All the operations were successfully accomplished and urethra was unobstructed after the catheter was removed. After the operations, the urinary flow rate was remarkably increased from (3.9±2.5) mL/s to (29.5±9.3) mL/s (P<0.05).

Conclusions: Multi-endoscopic technique combined with cryoscalpel and 2 micron continuous wave laser is safe and effective for treatment of male urethra stricture.

Keywords: Cryoscalpel; 2 micron continuous wave laser; male urethra stricture

doi: 10.3978/j.issn.2223-4683.2015.s056

Cite this abstract as: Xia H. The use of multi-endoscopic technique combined with cryoscalpel and 2 micron continuous wave laser in treating male urethra stricture. Transl Androl Urol 2015;4(S1):AB056. doi: 10.3978/j.issn.2223-4683.2015.s056

AB057. Intravesical laparoscopic harvest of bladder mucosa for urethroplasty

Son Fat Ho, Hio Fai Lao

Department of Urology, Centro Hospitalar Conde de Sáo Januário, Macau Special Administrative Region, China

Background: It is difficult to perform urethroplasty for recurrent hypospadia and/or urethral stricture. In the case of not enough prepuce, traditionally, the most often use free graft is "buccal mucosa" and "bladder mucosa". The bladder mucosa for urethroplasty is harvested by means of open surgery. That is quite traumatic, and causes post-operation abdominal wall pain, big scar, and is difficult to repeat the procedure due to scaring. We harvested the bladder mucosa by means of intravesical laparoscopy for urethroplasty. This is minimal invasive, cause minimal post-operation

