## Translational Andrology and Urology, Vol 4, Suppl 1 August 2015

37 patients (60.7%). The mean time to reach the nadir PSA was 11.6 months after operation. The short-term adverse events after operation included fever in 4 patients, hematuria in 7 patients, and hematochezia in 4 patients. The most common long-term adverse event was urinary irritation (31%); other long-term adverse events were rare, including hematochezia, hematuria, urinary incontinence, urinary retention, mild diarrhea and radiation enteritis. The estimated mean biochemical recurrence-free survival after brachytherapy was 41.0 months (95% CI: 31.05-50.94 months). The mean nadir PSA after operation were 1.32 µg/L in the 11 patients who received combined external beam radiotherapy, and their estimated mean biochemical recurrence-free survival was 38 months. Patients with nadir PSA below 1 µg/L had a significant longer biochemical recurrence-free survival than those with nadir PSA between 1 and 4 µg/L (42.9 vs. 32.0 months,  $\chi^2$ =4.445, P=0.035).

**Conclusions:** Brachytherapy is an effective treatment strategy for localized prostate cancer, with relatively low rate of severe adverse events. After brachytherapy, a nadir PSA below 1  $\mu$ g/L might indicate a better prognosis.

Keywords: Prostatic neoplasms; brachytherapy; prostate-specific antigen; disease-free survival

doi: 10.3978/j.issn.2223-4683.2015.s116

**Cite this abstract as:** Wang T, Fang D, Zhang C, Cai L, Zhang Z, He Z, Li X, Zhou L. Research of efficacy of brachytherapy for localized prostate cancer. Transl Androl Urol 2015;4(S1):AB116. doi: 10.3978/j.issn.2223-4683.2015.s116

AB117. Analysis of perioperative outcome and complications following radical cystectomy: a single center retrospective study of 1,212 patients in two decades

Yisen Meng, Yang Su, Wei Yu, Cheng Chen, Qian Zhang, Liqun Zhou, Jie Jin, Zhijun Xi Peking University First Hospital, Beijing 100034, China

**Objective:** Radical cystectomy remains the preferred treatment option for patients with advanced, localised urothelial bladder cancer, which is still a challenging procedure associated with longer operative time, more perioperative complications, longer lengths of stay and slower recovery. This retrospective study analyzed the clinical characteristics and perioperative complications of the patients with radical cystectomy in 20 years.

**Methods:** A retrospective study reviewed 1,212 patients who received radical cystectomy from January 1995 to December 2014 in Urological Department, Peking University First Hospital. We divided the patients into three groups by the time when they received the surgery (group A from January 1995 to December 2004, group B from January 2005 to December 2009, and group C from January 2010 to December 2014) and compared the perioperative outcome and complications among the three groups.

Results: There are 227 patients for group A, 368 for group B and 617 for group C. For clinical features of the different groups, the age was 61.73±12.886, 63.79±11.414, and 65.25±11.22 years for each group (P<0.001). The body mass index (BMI) was 18.58±5.439, 23.74±3.791, 24.08±5.65 kg/m<sup>2</sup> for each group (P<0.001). There were no statistically significant differences in gender, underlying disease, history of surgery, or American Society of Anesthesiologists (ASA) scores. For operative and perioperative features, There were statistically significant differences in operation time (401.8±99.39, 371.5±95.41, 306.4±100.49 min, P<0.001), estimated blood loss (1,608.4±1,127.05, 1,645.1±2,083.38, 690±813.87 mL, P<0.001), blood transfusion rate (P=0.001), open or laparoscopic surgery (P<0.001), different urinary diversion reconstruction methods (P<0.001) and length of stay (44.1±21.16, 31.71±18.76, 19.9±14.86 day, P<0.001). However, there was no statistically significant difference in pathological features or postoperative complications among the three groups.

**Conclusions:** For patients received radical cystectomy, the age and BMI were increased with the passage of time, with shorter operative time, reduced the amount of bleeding and the rate of allogeneic transfusion. Also, more patients received laparoscopic surgery and the length of hospital stay was shorter. However, pathological features or postoperative complications seems not to change along with time.

**Keywords:** Radical cystectomy; perioperative complications; pelvic lymph node dissection

doi: 10.3978/j.issn.2223-4683.2015.s117

**Cite this abstract as:** Meng Y, Su Y, Yu W, Chen C, Zhang Q, Zhou L, Jin J, Xi Z. Analysis of perioperative outcome and complications following radical cystectomy: a single center retrospective study of 1,212 patients in two decades. Transl Androl Urol 2015;4(S1):AB117. doi: 10.3978/j.issn.2223-4683.2015.s117

## AB118. Feasibility and safety evaluation of pure laparoscopic radical nephrectomy and thrombectomy for renal tumor patients with venous tumor thrombus

Qi Tang, Tianyu Wang, Xuesong Li, Dong Fang, Cuijian Zhang, Zheng Zhang, Gang Song, Yi Song, Zhisong He, Liqun Zhou

Peking University First Hospital, Beijing 100034, China

**Objective:** To evaluate the feasibility and safety of pure laparoscopic radical nephrectomy and thrombectomy for renal tumor patients with venous tumor thrombus.

**Methods:** From Jan 2013 to Dec 2014, records of patients with renal tumor and venous thrombus treated in our institute were retrospectively reviewed. Thirteen patients underwent pure laparoscopic radical nephrectomy and thrombectomy, including seven patients with renal vein (RV) thrombus and six patients with inferior vena cava (IVC) thrombus. Retroperitoneal approach was undertaken for RV thrombus patients, while transperitoneal approach or combined retroperitoneal and transperitoneal approach for IVC thrombus patients. During the combined approach surgery, renal artery and lumbar vein were controlled

## Translational Andrology and Urology, Vol 4, Suppl 1 August 2015

through retroperitoneal approach, and the thrombectomy procedure was completed through transperitoneal approach. Results: There were nine male patients and four female patients. All patients ranged from 30 to 78 years old (median, 55 years old). Seven patients were diagnosed by routine medical examination, while six patients had clinical symptoms, including four with gross hematuria and two with flank pain. All patients underwent operations successfully. Operation time ranged from 84 to 456 minutes (median 195 minutes). The blood loss ranged from 50 to 150 mL (median, 50 mL) for RV tumor thrombus patients, and 100 to 2,500 mL (median, 325 mL) for IVC tumor thrombus patients. All patients recovered well after surgery without major complications. With the postoperative pathological examination, the average tumor maximum diameter was 7.9±2.5 cm. Eleven cases of clear cell renal cell carcinoma, one case of chromophobe renal cell carcinoma and one case of renal metastatic osteosarcoma were showed in our study. Median follow-up time was 13 months (2-22 months). No decease was observed at the last follow-up. Three patients experienced distant metastasis after surgery, including two patients with multiple pulmonary metastases and one patient with lumbar vertebral metastasis.

**Conclusions:** Pure laparoscopic radical nephrectomy and thrombectomy is feasible and safe, with promising oncological prognosis. Combined retroperitoneal and transperitoneal procedures can take both the advantages of these two approaches and simplify operative manipulations. **Keywords:** Renal tumor; venous tumor thrombus; laparoscopic surgery

doi: 10.3978/j.issn.2223-4683.2015.s118

**Cite this abstract as:** Tang Q, Wang T, Li X, Fang D, Zhang C, Zhang Z, Song G, Song Y, He Z, Zhou L. Feasibility and safety evaluation of pure laparoscopic radical nephrectomy and thrombectomy for renal tumor patients with venous tumor thrombus. Transl Androl Urol 2015;4(S1):AB118. doi: 10.3978/j.issn.2223-4683.2015.s118