PE60 Experience of patients treatment with muscular invasive bladder cancer using the robotic complex Da Vinci S

EUR Urol Suppl 2019;18(6):e2635

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Introduction & Objectives: Radical cystectomy (RC) with pelvic lymphadenectomy is the “gold standard” for the treatment of muscle invasive bladder cancer (MIBC). However, RC is technically difficult and is associated with a large number of complications, from 13 to 67% according to some authors. Robot-assisted (RA) bladder resection is the alternative surgical treatment method of the MIBC, which allows to solve many issues that arise during the RC. This study was designed to evaluated of organ-preservation surgical treatment of MIBC results using the robotic system Da Vinci S.

Materials & Methods: The experience of 24 patients who underwent RA bladder resection at the period 2012–2019 was analyzed. Stage TNM: pT2a-вN0M0G1-2. The average age was 63.8 ±6.2 years. Inclusion criteria: a single tumor(s) of the bladder localized at the bladder neck T2a-в G1-2, N0. Surgical interventions were performed in 2 steps. Step I – RA bladder resection with transvesicular transillumination. Step II – ileo-obturatoric lymphadenectomy. In some cases, the preoperative urethrocystoscopy and ureteral stenting were required. There were no conversions and intraoperative complications.

Results: Time of surgical intervention was 135.2 ±19.1 minutes, blood loss – 79.2 ±27.2 ml. The hospital stay was 6.9 ±2.7 days. The number of complications according to the Clavien-Dindo system was 5.9%. The complications of I degree were not included to the study. The positive surgical margin was not detected in any case. Duration of follow-up observation was from 5 to 63 months (42,8±10,9). Four patients experienced the superficial relapse. Systemic progression of the tumor process was not detected in any patient.

Conclusions: Robot-assisted bladder resection is an alternative method of muscle invasive bladder cancer treatment, but it requires careful patient selection with subsequent long-term follow-up. RA bladder resection helps to achieve the satisfactory functional and oncological results, as well as to reduce the inpatient hospital stay. Concerning the surgeons, robot assisted bladder resection may represent an optimal surgical approach to urine bladder organ-preservation surgery.