

**C125****A critical analysis of perioperative mortality and morbidity from radical cystectomy**

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**Introduction and Objectives:** Radical cystectomy is a challenging operation, often performed on elderly patients with associated comorbidities that require diligent attention to pre-, intra-, and postoperative details. Despite this, complications do occur. It is important for all surgeons to be familiar with the presentation, prevention, and treatment of the major causes of morbidity and mortality associated with radical cystectomy and lower urinary tract reconstruction. We sought to analyze the perioperative events after radical cystectomy and urinary diversion in bladder cancer and to seek relationships with patient's characteristic and surgical procedures

**Material and Methods:** Between January 2006 and December 2008, 73 consecutive patients (82% male) underwent radical cystectomy and urinary diversion for primary carcinoma of the bladder, at our hospital. The average age was 63 yr (34–81). The preoperative characteristic of the patients (age, sex, hemoglobin, comorbidities) and perioperative data (operative time, type of urinary diversion, associated procedures) were recorded. Perioperative morbidity was defined by any adverse event during hospital stay or within 30 days after surgery.

**Results:** The perioperative mortality and morbidity rate were 2.73% and 35%. The most frequent medical complications were ileus (15%), urinary tract infection (4.1%) and sepsis (4.1). Surgical complications included evisceration (6.8%), wound infection and wound dehiscence (6.8%) and urinary fistula (4.1%). Between age and perioperative complications there was a significant correlation from the statistical point of view (Spearman's correlation coefficient  $r=0.23$ ,  $p<0.05$ ). No relationships between biological parameters, type of diversion, associated procedure and perioperative complications could be revealed. The postoperative hospital stay was significantly longer in patients with complications ( $25\pm 8$  d) compared with patients without complications who had a mean postoperative hospital stay of  $18\pm 5$  d.

**Conclusions:** Radical cystectomy remains an operative procedure with significant morbidity and potentially life-threatening complications. Thanks to a thorough understanding and improvement in surgical technique and perioperative anesthetic care, the early mortality from radical cystectomy has decreased from nearly 20% before 1970 to 5% in most contemporary series.

**C126****Validation of the Memorial Sloan-Kettering Cancer Center (MSKCC) postoperative nomogram predicting risk of recurrence after radical cystectomy for bladder cancer**

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**Introduction and Objectives:** Radical cystectomy has emerged as the primary treatment for localized or locally advanced invasive and high-risk superficial bladder cancer. In about half of patients undergoing surgery will develop distant metastasis. The key point of the adequate follow-up is the progression risk evaluation. The aim of the study is the validation of the MSKCC postoperative nomogram predicting 5-year progression-free probability after cystectomy. The nomogram includes information on patient sex, age, time from diagnosis to surgery, histology, node status and tumor grade.

**Material and Methods:** We performed radical cystectomy for cancer in 102 subjects from January 2002 to June 2008. Using the MSKCC nomogram we retrospectively evaluated their postoperative status. Three groups of progression risk were determined – high (calculated probability of remaining disease free at 5 years after cystectomy of 0–39%), intermediate (40–69%) and low (70–100%). We compared the nomogram information to the real metastasis and local recurrence development in our patients.

**Results:** In our file were 77 men and 25 women, the mean age was 65 years (46–77), transitional cell carcinoma was represented in 95% ( $n=97$ ), squamous cell carcinoma in 3% ( $n=3$ ), adenocarcinoma in 1% ( $n=1$ ) and small cell carcinoma in 1% ( $n=1$ ). The tumor stage of Tis in 4% ( $n=4$ ), Ta in 2% ( $n=2$ ), T1 in 22% ( $n=22$ ), T2 in 26% ( $n=27$ ), T3 in 24% ( $n=24$ ), T4 in 21% ( $n=21$ ) was reported. The tumor stage of T0 was described in 2 patients. The concomitant Tis was found in 6 cases. The high grade tumors were reported in 79% ( $n=81$ ), low grade tumors in 21% ( $n=21$ ), the positive nodes in 16% ( $n=16$ ). The synchronous development of prostate cancer was found in 18% of men ( $n=14$ ), possibly significant tumor of GS $\geq$ 7 in 2 cases. The median 5-year progression-free probability of 10% (range 1–25%) was calculated in the high risk group (enrolled 21% of patients,  $n=21$ ), 61% (range 43–66%) in the intermediate risk group (enrolled 35% of subjects,  $n=36$ ) and 83% (70–96%) in the low risk group (44% of patients,  $n=45$ ). The median follow-up for the entire cohort was 35 months (2–90). The distant metastasis or local recurrence were detected in 27% ( $n=12$ ) in the low risk arm (17% expected according to the MSKCC nomogram), in 42% ( $n=15$ ) in the intermediate group (39% expected) and in 76% ( $n=16$ ) in the high risk arm (90% expected) during follow-up.

**Conclusions:** Although the statistically significant difference in results of the group of the low risk (27% versus 17%) and high risk (76% versus 90%) of disease recurrence was found, the MSKCC nomogram has high predictive value in calculation of the progression-free probability in patients after radical cystectomy.

**C127****The comparative investigation of perineal muscle functions after Mainz pouch type II distraction of urine following radical cystectomy or after radical prostatectomy surgeries**

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**Introduction and Objectives:** Following Mainz pouch type II distraction of urine and radical prostatectomy, the changes in the functions of anal sphincter were investigated and compared.

**Material and Methods:** Within the frameworks of prospective examinations, the rest anal sphincter pressure (RASP) and the maximal contraction pressure (MACP) were determined with the usage of rectal manometry. During the investigations, the survey data of the preoperative stage were compared with the measurements which were carried out half a year after the radical surgeries. As for the state of continence, it was estimated with the help of a survey. The investigations were to be carried out in 15 patients in the case of Mainz pouch type II surgeries, while in the case of retropubic prostatectomy, 27 patients were involved in the study. The statistical calculations two-pattern t-probe were utilized

**Results:** In Mainz pouch surgeries significant decrease were detected in the RASP ( $86.33\pm 18.75$  vs.  $76.13\pm 13.86$   $p=0.0049$ )