

was 12× urothelial cancer (1 pT3, 2 pT2, 5 pT1, 4 pTa), 1× clear renal cell carcinoma pT3aG2, 1× oncocytoma and 1× xantogranulomatous pyelonephritis. Complications were rare, only urinary tract infection with *B. coli* on 6th postoperative day. Fourteen patients were discharged from hospital on 7±2 (5–11) day, patient with transplanted kidney was transferred on 3rd postoperative day to department of nephrology. The mean follow-up is 8 (1–14) months; patient with transplanted kidney underwent TUR for recurrent non-muscle invasive bladder tumour.

Conclusions: CLNUE is minimally invasive, fast and safe method without need to change patient's position. It is feasible even ipsilateral to a transplanted kidney. Open approach is reserved for advanced tumours only. We recommend starting NUE always with LNE. Liberation of ureter in pelvis is technically challenging, in case of any problems in pelvis, open ureterectomy can be performed. Long term oncological results are unknown. The work was supported by Czech government research project MSM 0021620819.

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Strictures of urethrovesical anastomosis after laparoscopic radical prostatectomy: Risk factors and treatment options

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Introduction and Objectives: Strictures on vesicourethral anastomosis (VUA) after laparoscopic radical prostatectomies (LRP) are relatively common complication. Beside prolonged extravasation on anastomosis, operations on prostate or bladder neck, which were done before radical prostatectomy, as risk factors for strictures on VUA, we think that meticulous preparation on bladder neck and apex of prostate as much as technique of anastomotic suturing, are major factors for prevention of strictures on anastomosis.

Material and Methods: 733 patients with prostate carcinoma were operated between Years 2004 and 2009. Follow up was at 1, 3, 6, 12, 18 and 24 month. Strictures were diagnosed urethroscopically. When the stricture was diagnosed, it was resolved with incision, transurethral resection (TUR) or with open reconstructions of anastomosis. Method selection depended of length and degree of stricture.

Results: After median time of 5.8 months, we diagnosed stricture on VUA in 18 patients (2.2%). We founded that prolonged extravasation and operative technique of preparation of bladder neck, apex and construction of VUA, are major factors for prevention of stricture. Incision on anastomosis was performed in 15 patient, in 2 patients we did TUR and in one patient we had to do done open reconstruction.

Conclusions: Preparation of bladder neck and apex, as much as construction of anastomosis are very important risk factors for preventions of stricture on VUA. Good operative technique and maintaining maximal concentration during the whole procedure is crucial.

C104

Laparoscopic nephrectomy for advanced renal tumours (cT2 >8 cm, cT3a–b, cN+)

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Introduction and Objectives: Laparoscopic radical nephrectomy (LRN) is considered a standard of care in the treatment of

T1–2 (≤ 8 cm) renal tumours. The objective of this paper is to summarize our results and our own experience in the treatment of advanced renal tumours (cT2 >8 cm, cT3a–b, cN+).

Material and Methods: From January 2003 to June 2009, we have accomplished 281 LRN at our institution. Transperitoneal approach was preferred in 259 (92%) patients. We preoperatively indicated CT or MR angiography of kidneys. Tumor thrombus was present in renal vein not extending into IVC. In our cohort, we identified patients with cT1–2 (≤8 cm) tumours – group 1 – and statistically compared their perioperative data with clinically advanced renal tumours (14× cT2 >8 cm, 51× cT3a, 5× cT3b, 1× cT3acN2) – group 2.

Results: There were 195 (73.7%) patients in group 1 and 70 (26.3%) patients in group 2. We found statistically significant differences (p-value <0.05) between these two groups in terms of tumour size (51.6±13.0 mm in group 1 vs. 70.0±19.4 mm in group 2) and weight of specimen (550.8±199.1 g in group 1 vs. 691.6±233.4 g in group 2). Remaining perioperative data (group 1 vs. group 2) were statistically comparable (mean age was 61.9±11.7 yrs vs. 63.5±10.0 yrs, operating time was 128.9±45.9 min vs. 118.8±31.1 min, blood loss was 82.8±128.0 ml vs. 108.9±141.5 ml, hospitalization time was 6.4±2.2 vs. 5.3±1.3 days, complication rate was 6.2% vs. 8.6% and conversion rate was 5.8% vs. 5.4%). Mean follow-up was 34.2±20.1 months in group 1 vs. 25.8±17.8 months in group 2.

Conclusions: Minimally invasive surgery in the treatment of advanced renal tumours (cT2 >8 cm, cT3a–b, cN+) is feasible in selected patients and demands experienced laparoscopic surgeon. Surgical outcomes are then comparable with T1–2 (≤8 cm) group. These procedures should be centralized and performed in high volume centres.

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C105

Extraperitoneal laparoscopic radical prostatectomy: Evaluation of learning curve

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Introduction and Objectives: Extraperitoneal laparoscopic radical prostatectomy (ELRP) is a technically exacting operative procedure. We demonstrate our center's learning curve.

Material and Methods: Between April 2005 and May 2009, 554 consecutive men with a mean age of 64.1 (range 47–72), a mean pre-operative PSA of 5.9 ng/ml and clinically localized prostate cancer underwent ELRP by six urologists at General Hospital Slovenj Gradec. Urologist I and II are senior surgeons that have extensive experience from transperitoneal laparoscopic radical prostatectomy and other laparoscopic procedures, urologist III has medium laparoscopic experience and other three urologists (IV–VI) have a little experience in laparoscopy. Operative time, estimated blood-loss and positive surgical margin rate were noted. All urologists assisted more than 100 transperitoneal laparoscopic radical prostatectomies before starting with ELRP. In order to our study the patients were divided into four subgroups consisting of the first 50 patients operated, the next 100, 150 and other 254 patients.

Results: In 5 patients the conversion was needed because of major bleeding. 11 complications required reoperation: 3 recto-vesical fistula, 1 rectal injury, 2 major bleeding and 5 anastomosis failure. There was no per-operative or post-operative mortality. Pathological stage was pT2 in 69.2% and pT3 in 30.8% tumors. Urologist I performed 178 operative procedures, urologist II 243, urologist III 54, urologist IV 42, urologist V 28 and urologist VI performed 9 procedures. Results of operative time, estimated blood-loss and positive surgical margin rate for all urologists are shown in the table.

Successive patients	Mean operative time (min)	Estimated blood-loss (ml)	Positive surgical margin rate (%)
1-50	150	280	33.2
51-150	140	237	26.1
151-300	149	206	19.4
301-554	138	163	15.3
1-554	143	198	19.9

Conclusions: There is an ongoing learning curve concerning mean operative time, estimated blood-loss and positive surgical margin rate even after more than 100 cases per urologist.

C106

Possibilities of reconstructing the vesicourethral anastomosis during laparoscopic radical prostatectomy

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Introduction and Objectives: To familiarize with the techniques (interrupted versus running suture) and suture materials used while reconstructing vesicourethral anastomosis during laparoscopic radical prostatectomies carried out in our department.

Material and Methods: Retrospective study evaluating techniques of vesicourethral anastomosis in a group of 250 patients undergoing laparoscopic radical prostatectomy in our department from January 2007 to November 2008. In the first group of 49 patients we used interrupted technique using UR-6, 2-0 Vicryl suture on $5/8$ needle. In the second group of 201 patients we performed running suture of vesicourethral anastomosis using EP-3, 2-0 Monolac fibre on two needles. The main evaluating criteria were feasibility of the technique, watertightness of the anastomosis and occurrence of anastomotic stricture.

Results: Running suture, which is now being used in our department seems to be much faster, easier to perform and with lower rates of potential complications: 1.0% versus 2.4% of urinary leak, 0% versus 4.1% of anastomotic stricture.

Conclusions: Both laparoscopic techniques of reconstructing the vesicourethral anastomosis during laparoscopic radical prostatectomy are technically demanding methods, with the advantage of the running one. However, in the hands of an experienced surgeon both of them have excellent outcomes with minimal complications for the patients.

C107

Laparoscopic assisted radical cystectomy – our initial experience

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Introduction and Objectives: Open radical cystectomy is the gold standard treatment for nonmetastatic muscle invasive bladder cancer. There is ongoing increase in interest with laparoscopic approach at selected centers worldwide. We report our preliminary results of this approach in 11 patients.

Material and Methods: From January 2008 to May 2009, 7 men and 4 women underwent laparoscopic assisted cystoprostatectomies or cystectomies for transitional cell carcinoma and adenocarcinoma of the bladder in 1 case. We report here our initial results.

Results: The mean operative time was 325 min, the mean blood loss 415 ml and the transfusion rate 9%. All procedures were completed laparoscopically without conversion to an open technique. We experienced 1 bowel fistula with no other complications during or after the operation. The pathology reports revealed pT1 stage (2002 TNM staging) in 2 cases, pT2

in 5 cases and pT3 in 4 cases. All the surgical margins were free of tumor invasion. Extended lymphadenectomy detected lymph node metastasis in 3 patients.

Conclusions: Laparoscopic assisted cystectomy is feasible and safe surgical technique. Long term follow up is needed to determine the oncologic outcome.

C108

Laparoscopic adrenalectomy – 10-years experience in a single institution

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Introduction and Objectives: To evaluate the results of the method introduced in 2000 in our institution.

Material and Methods: We have retrospectively reviewed the records of patients who underwent the laparoscopic adrenalectomy between 2000-2009.

Results: The laparoscopic adrenalectomy was performed in 154 cases in above mentioned period. In 74 cases (48%) on the right, in 80 cases (52%) on the left side. The average size of the specimen was 4.5 cm (1.5-12 cm). The average operating time was 64 min (38-200 min). In 15 cases there was a blood loss more than 100 ml (100-600 ml). We have experienced 3 serious perioperative complications – lesion of pancreas in 2 cases and lesion of the colon in 1 case. We had to convert to open surgery in 6 cases. Histological examination showed most frequently adrenocortical adenoma (39%), hyperplasia (24%), feochromocytoma (7%), metastatic disease (13%).

Conclusions: The laparoscopic adrenalectomy is a safe procedure with low occurrence of complications. The transperitoneal approach offers large operative field with good orientation.

C109

Laparoscopic and open partial nephrectomy: a matched pair comparison of 200 patients

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Introduction and Objectives: Laparoscopy is currently challenging the role of the open approach for nephron-sparing surgery, yet comparative studies on this issue are scant. Aim of this study was to compare surgical, oncological and functional outcome after laparoscopic (LPN) and open (OPN) partial nephrectomy.

Material and Methods: Matched-pair (age, sex, tumour size) analysis of patients who underwent elective nephron-sparing surgery for renal masses either by laparoscopic (Klagenfurt) or open (Vienna) access. Surgical data, complications, histological and oncological data and short and long-term renal function of the open and laparoscopic group were compared.

Results: In total, 200 patients after either LPN or OPN, matched for age, sex and tumour size, entered the study and were followed for a mean of 3.6 years. Surgical-, ischemia- and hospitalization times were shorter in LPN ($p < 0.001$). Blood loss and complication rates were comparable in both groups. Malignant tumours were pT1 stage renal cell cancer only in both groups. Positive surgical margin rate was 4% after LPN and 2% after OPN ($p = 0.5$); positive margins were not a risk factor for disease recurrence. Kaplan-Meier estimates of 5-year local recurrence free survival was 97% after LPN and 98% after OPN ($p = 0.8$), the respective numbers for distant free survival were 99% and 96%, respectively ($p = 0.2$). 5-year overall survival for