

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

patients with pT1 stage RCC was 96% (LPN) and 85% (OPN). The decline in glomerular filtration rate at the last available follow-up (LPN -10.9%, OPN -10.6%) was similar in both groups ( $p=0.8$ ).

**Conclusions:** In experienced hands, LPN provides similar results compared to open surgery. Positive surgical margin rates were similar after LPN and OPN. Current experience in these patients does not seem to justify a secondary nephrectomy.

#### C110

##### Laparoscopic heminephrectomy in adult patients – initial experience

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**Introduction and Objectives:** Benign kidney's diseases are considered to be a good indication for laparoscopic intervention. In pediatric population laparoscopic heminephrectomy due to pathologies of duplex kidney are well recognized. We present initial experience in first two cases treated for hydronephrotic upper pole of kidney with duplicated collected system

**Material and Methods:** Two female patients age 48 and 21 with mildly symptomatic upper pole hydronephrosis due to ectopic distal implantation of ureter and impacted distal ureteric stone were treated by laparoscopic transperitoneal approach. Partial nephrectomy with ureterectomy were performed in a lateral flank position through 4 trocars. Colon was reflected medially by incision along the Told line and both ureters were clearly identified. Careful dissection of renal hilus permitted for identification of polar vessels which were clipped and transected. Upper pole ureter was dissected toward the bladder level and closed with clips of vessel sealing system device. Parenchymal section was performed using Ligasure coagulation after complete dissection of upper pole renal pelvis. Additional haemostatic sutures were placed if necessary. Specimen was removed in an endobag and 12 Fr suction drain was left for 24-48 hours.

**Results:** Both interventions were completed laparoscopically, no conversion to open surgery was necessary. Duration of surgery was 120 min and 145 min. Blood loose was minimal and no transfusion was required. Postoperative complication occurred in one patient – formation of renal abscess necessitating percutaneous drainage and parenteral antibiotic therapy. On 6 month follow up both patents were symptoms-free and the remaining moiety of the kidneys were unchanged with no dilatation of collecting system

**Conclusions:** Laparoscopic heminephrectomy is feasible however technically demanding with possible significant complications and has a potential to offer all advantages of minimally invasive surgery

#### C111

##### Endoscopic extraperitoneal radical prostatectomy (EERPE): a retrospective analysis of 128 patients

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**Introduction and Objectives:** A report of a retrospective analysis – EERPE from 2004-2008

**Material and Methods:** 128 patients were evaluated regarding operation time, histology, complications and functional outcome. Mean follow-up was 28 months (6-64).

**Results:** Mean age of the patients was 62 (42-77) years, mean preoperative PSA 6.12 ng/ml (0.41-15.36). Mean operation time was 219 minutes for the first 50 patients and 119 minutes in 2008. Conversion to an open procedure was necessary in under 5%. In 94% postoperative histology showed a T2, in 6% a T3 tumor. Positive surgical margins were found in 9%. 14% of the patients had a PSA rise over 0.1 ng/ml: 11% – 0.1 ng/ml;

1 patient – 0.3 ng/ml (R1) and 1 patient – 3.9 ng/ml (R1). Transfusion rate was 6%. Significant complication rate was under 2%, stricture rate 10%. Mean catheterization time had been reduced from 20 days (first 50 operations) to 8 days during the last year. In 85% an incontinence questionnaire was evaluated. 89% were continent (maximum 1 pad/d), 11% needed 2 or more pads/d.

**Conclusions:** Our retrospective analysis of the EERPE shows comparable results regarding functional and oncological outcome to the open procedure after an initial learning curve.

#### C112

##### The 16-dot-plication technique for correction of penile curvature – initial result

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**Introduction and Objectives:** Plication surgery is a simple technique, performed to correct penile curvature, either congenital or secondary to Peyronie's disease (PD). The long term results after traditional plication techniques have shown recurrence in about 25% of cases. The recurrence is probably due plication under a high tension and, subsequently, suture failure from tissue cut-through or suture breakage. To improve the outcome of surgical treatment for penile curvature, we decided to shift our surgery to a more standardized and minimal tension technique. Our objective is to report the outcomes of the 16-dot-plication (16DP) for correction of penile curvature.

**Material and Methods:** 12 patients (age 22-68 years) with penile curvature between 30° and 70° were selected for 16DP. Out of 12 cases, 3 patients were young (22-26 years), with congenital penile curvature. The other 9 patients (57-68 years) presented with curvature secondary to PD, mild erectile dysfunction and systemic vascular comorbidities. After a detailed inform consent regarding penile shortening, 16DP with Silk 2.0 was performed for all patients.

**Results:** The mean operative time was 64 minute (58 to 80). No immediate postoperative complications were recorded. All patients returned to sexual activity 2 weeks after surgery, either spontaneous (10 patients) or after oral treatment (2 patients). The mean penile shortening was 0.7 cm (0.5 to 1.6). After a mean follow-up period of 10 months (3 to 20) 10 patients have complete straight penis and 2 have a mild deviation (under 5°).

**Conclusions:** In our experience 16DT is a short, simple and safe method to correct congenital and acquired penile curvature. Real time intraoperative straitening and parallel plication using a minimal tension are the main advantages of this technique. A good preoperative inform consent is essential to avoid dissatisfaction about penile shortening. Larger and longer patient series and comparative multicenter trials using this technique are mandatory in order to become a standard plication procedure for penile curvature.

#### C113

##### 10 years experience with bipolar approach in complete urethral strictures

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**Introduction and Objectives:** Urethral strictures (US), impassable in a retrograde fashion, impose a special problem to the urologist. Open urethroplasty is usually required. Our goal was to evaluate the results of bipolar endoscopic procedures (BEP) in such cases.

**Material and Methods:** Between November 1999 and January 2009, we evaluated 42 patients with complicated urethral