

from April 2004 to May 2005 in the E. Michałowski's Hospital in Katowice were analysed. 41 patients had PCNL as a main method and, when the need appeared, further stages with various techniques: another PCNL, URS, D-J catheter kidney intubation, in order to evacuate all the stones from the kidney. Two patients had classical operations due to complications caused by other disorders: anatomical anomaly (horseshoe kidney) and active lupus erythematosus and further additional procedures necessary to total stone removal.

**Results:** All patients achieved total recovery from the staghorn calculus. The aim of our analysis was to determine what investment of skills and equipment was needed to achieve the therapeutic success. In group I: (boarder stone fills renal pelvis or renal pelvis and part of one calyx) 7 patients achieved full recovery after 8 procedures (one patients had an additional kidney intubation with D-J catheter). In group II: (partial staghorn stone fills renal pelvis and two calyces) 18 patients had 31 procedures (PCNL, EWSL+D-J) and in group III (total calculus – the stone fills all the pelvocalyceal system) 21 patients had 53 procedures. In the group of patients with complications caused by other disorders, surgical operation as a monotherapy did not remove all the stone – they required 8 or 5 procedures.

**Conclusions:** The treatment of renal staghorn calculi should be done by endoscopy in several stages. Traditional treatment with open surgery does not ensure a removal of all the stone, so the combined therapy consisting of other procedures, including endoscopy, must be applied. Renal staghorn calculus is a difficult urological problem and requires individual financing including expenses of multi-stage treatment.

#### N102

##### Feasibility of prepuce reconstruction in hypospadias repair

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**Introduction and Objectives:** Prepuce reconstruction has been part of hypospadias repair in selected patients. It has been our policy to try to repair the prepuce in all the patients with hypospadias as part of total penis reconstruction.

**Material and Methods:** 92 patients aged 0.8–15.5 years admitted for primary hypospadias repair were examined / 28.3% distal, 53.2% middle, 18.5% proximal /.

**Results:** Prepuce repair was performed in 72.8% of all, in 80.6% and 83.6% with distal and middle hypospadias, but in proximal hypospadias – 17.6%. On follow-up 88.1% patients had a retractable prepuce, in 6% partial or complete dehiscence was found, in 6% phimosis developed. Urethral fistula developed in 4% patients.

**Conclusions:** Foreskin reconstruction was possible in the majority of patients with distal and middle hypospadias, but not so in proximal variants.

#### N103

##### Colics from the heart

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**Introduction and Objectives:** Acute renal infarction is an often missed yet an established entity in patients with cardio-vascular risk factors. Britain has got the highest incidence of ischemic heart disease and the fastest growing geriatric population in Europe, therefore more thrombo-embolic pathology involving the renal tract can be expected.

**Material and Methods:** Data of 434 patients with a clinical diagnosis of ureteric colic and haematuria was reviewed retrospectively presenting between January 2007 and December

2008. 22 patients with persistent pain and/or raised inflammatory parameters with no evidence of obstructive uropathy on IVU (182) or non-contrast CT (252) underwent contrast enhanced CT scans. Cardio-vascular risk factors were concomitantly noted.

**Results:** Out of the group having contrast CT, 5 patients (3 males, 2 females) with mean age was 67.3 years, were shown to have renal infarctions (2 right & 3 left kidney). Single infarct was seen in 1 while multiple infarcts were noted in 4 cases. Overall 1.15% cases of the cohort demonstrated renal infarction. 3 patients had rate controlled atrial fibrillation and 2 had a previous myocardial infarction.

**Conclusions:** Acute renal embolus is a rare entity, accurate data regarding presentation, laboratory tests, and diagnostic techniques and treatment is not yet available. In patients presenting with the triad of 1) high risk for thromboembolic event 2) persistent flank/abdominal pain 3) haematuria +/- raised inflammatory parameters having had a normal IVU/CT KUB, a contrast enhanced CT scan to rule out renal infarction should be considered.

#### N104

##### Reimplantation of the strictured ureter – laparoscopic approach

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**Introduction and Objectives:** Laparoscopic technique successfully replaces classic open surgical methods in urology. Ablation surgery is a method of special interest for laparoscopy. Reconstructive urology less frequently applies laparoscopic techniques that mainly depend on the center's experience. The aim of the study is to evaluate the course and outcome of laparoscopic treatment of the strictured distal ureter.

**Material and Methods:** Two males aged 41 and 73 years with the diagnosis of strictured left distal ureter with subsequent symptomatic hydronephrosis underwent surgery. The stricture of the distal ureter was caused in both cases by scars resulting from transurethral resection of the superficial cancer of urinary bladder located nearby the ureter's orifice. The diagnosis was confirmed by urography and pyelography performed after implantation of the nephrostomy catheter. The length of the stricture was 2 cm. Both patients did not achieve patency of the ureter despite preoperative deep resection of the scar. No features of the malignant relapse were found. Laparoscopic procedure was performed using 3 working ports and camera port. Mobilization of the colon was followed by identification and preparation of the distal ureter. Then the distal ureter was excised from the urinary bladder, spatulated and after ureteric stenting a new ureterovesical anastomosis was created. Intermittent sutures were applied through the full thickness of the urinary bladder wall. Ureteric stent was removed 4 weeks after surgery.

**Results:** Mean surgery time was 145 minutes, blood loss –25 ml and postoperative hospitalization 5 days. No intraoperative or postoperative complications were noted. The efficacy of the treatment was evaluated basing on patient interview and intravenous urography performed 1–2 days following the removal of the ureteric stent. In each case normal urinary flow from the kidney to the urinary bladder was noted. Cystoscopy performed 3 months post-surgery revealed normal picture of the urinary bladder and orifice of the reimplanted ureter in the treated males.

**Conclusions:** Laparoscopic reimplantation of the ureter is an efficacious and safe alternative to open surgery in the chosen patients treated in the centers experienced in reconstructive laparoscopic surgery.