

a center with high experience in this field. However, analysis of these cases is crucial in order to avoid future similar accidents.

### C68

#### **Migrated and calcified ureteral stents: A challenging problem (experience on 125 cases)**

I. Arabagiu\*, D. Georgescu, V. Cauni, V. Mirciulescu, G. Nita, R. Multescu, C. Persu, E. Alexandrescu, B. Geavlete, P. Geavlete. *Saint John Emergency Clinical Hospital, Dept. of Urology, Bucharest, Romania*

**Introduction and Objectives:** The management of calcified or migrated ureteral stents may be a complex and difficult task. This study aimed to evaluate the efficacy of the endoscopic treatment in these cases.

**Material and Methods:** Between January 2000 and January 2009, we treated 67 patients with calcified stents (Group I) and 58 patients with migrated ureteral stents (Group II). Group I consisted of 34 cases with inferior loop calcification, 13 cases with superior loop calcification, 9 cases with both inferior and superior loop calcification, 8 cases with calcification of the ureteral segment, 3 cases with calcification of the entire stent length. The average stenting time was 14.6 months (range 3–36 months). Group II consisted in 52 cases with the distal loop ascended into the ureter and 6 cases with the stents completely migrated into the pyelocaliceal system.

**Results:** In Group I, we performed vesical ballistic lithotripsy (34 cases, 100% success), percutaneous nephrolithotomy (13 cases, 92.3% success), vesical ballistic lithotripsy and percutaneous nephrolithotomy (9 cases, 100% success), ureteroscopic lithotripsy (8 cases, 87.5% success), vesical ballistic lithotripsy, ureteroscopy and percutaneous nephrolithotomy (3 cases, 100% success). In Group II, we performed retrograde ureteroscopic extraction in 57 cases. In one case with a stent ascended superjacent to a neoplastic extrinsic ureteral stenosis, impassable in a retrograde fashion, we performed minipercutaneous stent's extraction using a semirigid ureteroscope antegradely inserted.

**Conclusions:** Calcified or migrated stents may be successfully managed using endoscopic techniques. Combined retrograde and antegrade endourological approach is often necessary, sometimes requiring advanced endoscopic skills.

### C69

#### **Ureteroscopy in proximal ureteral calculi: experience on 1238 cases**

E. Alexandrescu\*, V. Cauni, D.A. Georgescu, G. Nita, V. Mirciulescu, R. Multescu, M. Dragutescu, B. Geavlete, P. Geavlete. *Saint John Emergency Clinical Hospital, Dept. of Urology, Bucharest, Romania*

**Introduction and Objectives:** In the past 25 years, the treatment of proximal ureteral lithiasis evolved from ureterolithotomy to extracorporeal shockwave lithotripsy and/or ureteroscopy. Our objective was to analyse, in a significant series, the results of retrograde ureteroscopy in proximal ureteral lithiasis.

**Material and Methods:** Between June 1994 and February 2009, in our clinical department 5102 patients underwent retrograde ureteroscopy (5534 ureteroscopic procedures). Upper urinary tract lithiasis was the main indication, which was used in 4562 cases. The proximal ureteral calculi were treated on 1238 cases, 442 and 796 being larger and respectively smaller than 1 cm.

**Results:** The stone-free rate after one procedure was 86.5%. According to stone size, the success rates were 81.9% for calculi over 1 cm and 88.9% for stones smaller than 1 cm. Treatment failures were related to ascending migration of stone fragments (7.2%), impossible approach of the calculus (5.2%) and aborting the procedure due to complications (1.1%). The intraoperative

incidents occurred in 1.3% of the cases: fixed stone extractors (0.6%), equipment damages (0.4%) or JJ stent malpositioning (0.3%). The incidence of intraoperative complications was 3.4%: mucosal abrasion (1.4%), false passage (1%), ureteric perforation (0.5%), extra-ureteral stone migration (0.1%), bleeding (0.1%), ureteric avulsions (0.2%). Early complications were described in 10.2%. We also found late complications such as ureteral stenosis (2 cases) and persistent vesico-ureteral reflux (1 case).

**Conclusions:** According to our experience, ureteroscopy represents a valuable option in proximal ureteral lithiasis treatment with high stone-free rates and minimum morbidity.

### C70

#### **Complications after 2000 percutaneous procedures**

V. Mirciulescu<sup>1</sup>\*, V. Cauni<sup>2</sup>, D.A. Georgescu<sup>2</sup>, G. Nita<sup>2</sup>, R. Multescu<sup>2</sup>, M. Dragutescu<sup>2</sup>, P. Geavlete<sup>2</sup>. <sup>1</sup>*Saint John Clinical Emergency Hospital, Dept. of Urology, Bucharest, Romania*; <sup>2</sup>*Saint John Emergency Clinical Hospital, Dept. of Urology, Bucharest, Romania*

**Introduction and Objectives:** Percutaneous nephrolithotomy (PCNL) is nowadays a widely practiced procedure. Despite the good stone-free rates, it still has a specific morbidity. Our goal was to describe the complications of this method on a significant series of patients.

**Material and Methods:** Between January 2001 and January 2009, 2115 patients (age between 18 and 81 years old) underwent PCNL (2301 procedures). We used 24 F rigid nephroscopes (2204 procedures) and 15F flexible ones (126 procedures). The mean follow-up period was 67 months (range 3 to 132 months).

**Results:** Intraoperative incidents were encountered during 92 procedures (4%): losing the percutaneous tract (43 cases), poor visibility due to bleeding and imposing the termination of the procedure (35 cases) and descendant stone fragments' migration imposing antegrade ureteroscopic removal (14 cases). The overall complications' rate was 22% (506 cases): significant bleeding requiring blood transfusions (72 cases), nephrectomy (2 cases) or open surgical hemostasis (3 cases), sepsis (3 cases), fever (89 cases), pyelocaliceal perforations (35 cases), hemoperitoneum (1 case), persistent lumbar urinary fistulae requiring retrograde JJ ureteral stenting (299 cases) and extrarenal stone fragments migration (2 cases). However, the majority of these complications were minor. The mortality rate related to PCNL procedures was 0%.

**Conclusions:** According to our experience, PCNL is a safe and effective technique. Most of the intraoperative incidents or complications are minor and easy to solve. However, an adequate training is imperative in order to reduce the associated morbidity.

### C71

#### **Bilateral single procedure percutaneous nephrolithotomy**

V. Mirciulescu\*, V. Cauni, D. Georgescu, E. Alexandrescu, P. Geavlete. *Saint John Emergency Clinical Hospital, Dept. of Urology, Bucharest, Romania*

**Introduction and Objectives:** Unlike SWL or ureteroscopy, the percutaneous renal approach is not limited by stone size. However, the inherent complications of this technique, some of which really significant, necessitate a rigorous selection of the cases.

**Material and Methods:** Since introducing the percutaneous approach in our department in 2001, more than 2000 patients benefited from this surgical technique. With the continuously expanding experience, we approached more and more complex cases, with good results and a decreasing rate of complications. Among the 2103 patients with lithiasis, 174 presented bilateral disease. 6 patients were operated by single session percutaneous