size were accepted as failure and referred to other treatment alternatives. 

Results: Of the 476 patients, 163 were female and 313 male. The mean age was 44.8 ± 12.78 (14-80) years. The mean stone burden was 117.95 ± 103.60 (19.625-1177.5) mm². The mean number of SWL sessions was 2.21 ± 1.04 (1-5) per patient. Each patient had a mean number of total shots 5254 (1000-10118). The mean cumulative energy delivered per patient was 172.55 (22-682.19) joule. Overall stone free rate after the treatment was 82.14% (391/476). The distribution of stones, success rate and other parameters according to localization are summarized in Table 1. Three patients, who admitted to emergency room with colic pain after SWL session, were diagnosed to have subcapsular hematoma smaller than 3 cm due to ureteric calculi. Although patients with D-J stents had shorter hospital stay, improvement of white blood cell (WBC) count and C-reactive protein (CRP) values, which might indicate faster recovery from the infection. Treatment of infected hydronephrosis were admitted in 2 referral centers for urgent renal drainage in cases of obstruction and infection associated with ureteral calculi. 

Introduction & Objectives: Management of infected hydronephrosis is a urological emergency which needs urgent decompression of renal collecting system. However, the optimal method of decompression has not yet been established. We compared the efficacy of percutaneous nephrostomy with retrograde ureteral catheterization for renal drainage in cases of obstruction and infection associated with ureteral calculus.

Material & Methods: Patients with clinical signs of infected hydronephrosis due to ureteric calculi were divided in 2 groups according to renal decompression method. Group A consisted of the D-J stent group and Group B the percutaneous nephrostomy group. Clinical characteristics and laboratory parameters between both groups were recorded. The time to normal temperature, length of hospital stay, improvement of white blood cell (WBC) count and C-reactive protein (CRP) were compared. The 2-tailed independent t-test was used for statistical analysis.

Results: Between April 2004 and April 2010, 150 patients with clinical signs of infected hydronephrosis were admitted in 2 referral centers for urgent renal drainage. The WBC and CRP values were significantly higher in Group B (p<0.001). The mean time to normal temperature after decompression was 3.32 ± 1.13 and 3.38 ± 1.33 days for Group A and B, respectively (p=0.75). The mean length of hospital stay was 6.28 ± 2.7 and 7.75 ± 1.6 days for Group A and B, respectively (p=0.001). Significant improvements in CRP values after decompression were observed only in the nephrostomy group (p<0.001). One ureretic perforation was observed in Group A, which was treated with nephrostomy placement and 2 renal hematomas were recorded in Group B, which were managed conservatively.

Conclusions: Our study has shown that analgesia requirements, length of operation and hospitalisation was more in group 1 than group 2. Consequently, we believe that totally tubeless PCNL can be safely performed in selected cases.

S98 TOTALLY TUBELESS PERCUTANEOUS NEPHROLITHOTOMY COMPARED WITH STANDARD PERCUTANEOUS NEPHROLITHOTOMY IN CHILDREN: PRELIMINARY REPORTS

Gökşütlü H.N.G., Yesil S., Öztürk U., Tuygun C., Imamoğlu M.A. Diskapi Yildirim Beyazit Training and Research Hospital, Dept. of Urology, Ankara, Turkey

Introduction & Objectives: Our study was compared with totally tubeless PCNL againsts standard PCNL technique in children. 

Material & Methods: Twenty-seven children underwent PCNL for renal stones aged 15 years or younger. the patients were divided in two groups as totally tubeless PCNL (no nephrostomy tube and no ureteral stent) in 12 patients (Group-1) and standard PCNL (nephrostomy tube with or without ureteral stent in 15 patients (Group-2). Inclusion criteria for the totally tubeless PCNL, during the operation; patients having 1- No perforation in the collecting system, 2- No serious bleeding, 3- No more than one access, 4- No serious extravasation after procedure that is controlled by retrograde pyelography, and also at the end of the operation; patients having 1- Stone free or clinically insignificant residual fragments (CIRF) (<4 mm), 2- No bleeding for 5 minutes after operation which is acceptable bleeding time for children. The length of hospitalization, visual analog scale at first and sixth hour, drop in hemoglobin level, the operation time, the fluoroscopy time, analgesic requirement of the two groups of patients totally tubeless PCNL (Group 1) and standard PCNL (Group 2) - were compared statistically.

Results: The mean age (range) was 5.25 (1-9) and 9.4 (5-15) years in group 1 and 2, respectively (p<0.001). The female : male ratio was 4:5. Stones were located in the all PCNL procedures were done via one access and subcostal approach: 11 (91.7%) lower pole, 1(8.3%) middle pole in group 1, 10(66.6%) lower pole, 5(33.3%) middle pole in group 2 (p<0.04). The mean(range) stone burden for group 1 was 199 (100-320) mm² and 402.67(95-1550) mm² for group 2. (p=0.07). The mean(range) of operation time was 15.83(5-25) in group 1 and 20.33(6-30) in group 2, respectively (p<0.05). The mean length of hospital stay was 1.83 (1-4 days) in group 1 and 5.33 (1-12 days) in group 2 (p<0.05). The drop in hemoglobin level was 1.83(range 0-5) in group1 and 5.2 (range 2-10) in group2, respectively(p<0.05). The mean fluoroscopy time was 2.24 for group1 and 4.99 for group2 (p<0.05) The mean paracetamol requirement was 6.85mg/kg (range 3.01-31.96) for group1 and 7.07(5.5-8.92) for group 2 (p<0.05).

Conclusions: Our study has shown that analgesia requirements, length of operation and hospitalisation was more less in group 1 than group 2. Consequently, we believe that totally tubeless PCNL can be safely performed in selected cases.

S99 DOES PREVIOUS RENAL SURGERY INCREASE THE RISK OF BLEEDING AND VASCULAR COMPLICATION IN PERCUTANEOUS NEPHROLITHOTOMY?

Öztürk U., Yesil S., Gökşütlü H.N.G., Tuygun C., Nalbant I., Imamoğlu M.A. Diskapi Yildirim Beyazit Training and Research Hospital, Dept. of Urology, Ankara, Turkey

Introduction & Objectives: To evaluate the effect of previous renal surgery and shock wave lithotripsy (SWL) on developing hemorrhagic and vascular complications in percutaneous nephrolithotomy procedures.

Material & Methods: Percutaneous nephrolithotomy (PNL) applied to 372 renal unite in our clinic between March 2007 and June 2010. Postoperatively reentry nephrostomy catheters was located on pelvicalyceal system routinely. Patients were divided into 4 groups, as previous open renal surgery, percutaneous surgery, SWL and control group (have not previously received treatment for kidney stones). Bleeding in the early postoperative period was controlled with clamping nephrostomy catheters for 30 minutes in almost all cases. We evaluated the pre and postoperatively complete blood counts, operation and scopy times of patients. Cases with postoperative bleeding which continued or restarted were evaluated with ultrason, computerized tomography and renal Doppler ultrasound to determine vascular complications. Patients who required blood transfusions were hospitalized and transfused. Renal selective angiography was done to cases with vascular complications.

Results: Ages and localization of kidney stones of patients were homogeneous (p>0.05). Although patients with open surgery had more decreased levels of hemoglobin, it wasn’t statistically significant (p=0.2). Operation times were similar in all of the groups (p=0.95). There was no statistical significance in scopy time (p=0.48) and irrigation fluid (p=0.22) between groups. Postoperative hospitalization time of patients was not also statistically significant (p=0.6). Patients with decreased hemoglobin levels were transfused and discharged after bleeding control. But on follow up, 12 of patients had continuous hematuria and 7 of patients had intermittent hematuria. They evaluated renal doppler ultrasound. Arteriovenous fistula was detected in four patients and pseudoaneurysm was detected in one patient. Four of these patients had open surgery previously and one of them had PNL. The ages were between 44-66 years and selective renal angiography was done to these five patients on follow up. The arteriovenous fistula heated spontaneously and the other four cases treated with embolization.

Conclusions: PNL is the first choice treatment of renal stones. But this procedure has some rare complications as bleeding, sepsis, pleura and colonic injuries.