

VID-04

The split leg modified lateral position for percutaneous renal surgery in children with adults technique

M. Lezrek, A. Ammani, M. Asseban, K. Bazine, M. Alami, K. Moufid, A. Beddouch

Department of Urology, Military Hospital Moulay Ismail, Meknes, Morocco

Introduction: We present a video of percutaneous nephrolithotomy (PCNL) in children with our standard adult's technique, in the lateral modified position and using a 20.8-Fr adult nephroscope.

Methods: Between January 2007 and August 2010, 5 boys and 2 girls, aged between 5 to 15 years, undergone PCNL with the modified lateral position. The indication was failure of ESWL in 3 cases and complex stones for others.

Operative Technique: The children were placed with the trunk in the lateral position, the pelvis in oblique position and the lower limbs are split and bent in the lowest position. Initial placement of a retrograde ureteral catheter, Tract formation, stone fragmentation and retrieval and optional extra procedures were accomplished with the patient in the same position. Ureteroscopy in 2 children and all ureteral catheter placements were performed with an 8 Fr adult ureteroscope. Caliceal puncture and tract formation using "one step" dilation with 24 Fr Amplatz dilator and sheath, were performed under fluoroscopic control. A 20.8 Fr Wolf nephroscope was used.

Results: We realized 9 PCNL (3 left, 2 right, 2 bilateral), with 6 approaches in upper calyx and 3 in medium calyx. The PCNL was possible in our young patients using 20.8 Fr "adult" nephroscope with fragmentation and extraction of stones in all cases. In the immediate postoperative, 8 renal units have been cleaned of all stone fragments. No hemorrhagic, splanchnic, or intra-thoracic complication was noted. No transfusion was required. The Clavien score distribution was: no complication in 7 PCNL (77%) and grade 1 in 2 PCNL (23%).

Conclusion: The pediatric PCNL technique is safe and possible with the modified lateral position. The use of adult instruments was possible, thus PCNL in children can also be performed by adult-urologists, with no need of specialized additional instruments.