

Retroperitoneoscopy for the Treatment of Ureteral Stones

Introduction and Objective: To assess the efficacy of retroperitoneoscopy for treating stones in the upper or middle ureter.

Materials and Methods: Between November 2008 and October 2010 twenty-four patients underwent retroperitoneoscopy for treatment of ureteral stones located in upper or middle ureter above the iliac vessel. Stone size ranged from 1-3.5 cm with a mean of 2.2 cm. Eleven patients had history of unsuccessful extracorporeal lithotripsy.

Results: Retroperitoneoscopy was performed by creation of space with digital dissection and balloon dilatation in flank position. Two 10 mm and one 5 mm trocars were used. The stones were removed by opening the ureter with a laparoscopic scissor directly on stones. The sites of incisions were closed with 4-0 vicryl suture. Double-J was inserted in sixteen patients (66.6%). Operation time ranged from 50 to 180 minutes with a mean of 120 minutes. The mean hospital stay was 6 (3-11 days). There were 3 (12.5%) extravasation that were managed by observation.

Conclusion: Retroperitoneoscopic ureterolithotomy is a first-line treatment for ureteral stones larger than 2 cm or small stones that other treatments have failed.