

Incidence and management of major complications of ureteroscopic lithotripsy in Esfahan, Iran during 1994-2006

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Abstract

Background & Objective: Ureteroscopic lithotripsy is a prevalent and minimally invasive modality for the management of ureteral calculi. This study was done evaluate to the incidence and management of major complications in 3900 cases of ureteroscopic lithotripsy.

Materials & Methods: This descriptive – cross sectional study was done on 3900 cases of ureteroscopic lithotripsy in Isfahan – Iran, during 1994-2006. All complications and treatment of patients recorded.

Results: Major complications occurred in 29 cases either intraoperatively or postoperatively (1 to 30 days), including ureteral perforation in 16 cases, ureteral avulsion in 7, urinoma in 4 and perinephric abscess in 2. Two cases of uretral avulsion at the ureterovesical junction underwent ureteroneocystostomy. The other 5 cases were managed by psoas hitch together with Boari flap, transureteroureterostomy, open placement of double J stent with omental wrap, and ureteroscopic placement of double J stent and ileal substitution. Urinomas were managed by percutaneous drainage of the urinoma and placement of double J stent (3 cases) and open surgery (1case). Two cases of perinephric abscess were managed by open surgical procedure and double J placement. Fourteen cases of ureteral perforation were managed by ureteroscopic double J placement and in 2 cases by open surgery.

Conclusion: Ureteroscopic lithotripsy is an excellent and minimally invasive modality for the management of ureteral calculi. Major complications may occur, emphasizing the need for constant vigilance and precautionary measures.

Key Words: Ureteroscopic lithotripsy, Ureteral calculi, Major complications

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