

A comparative study between Extracorporeal Shock Wave Lithotripsy and Ureterorenoscopic Lithotripsy in the management of upper ureteric calculus.

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ABSTRACT

Introduction and Objective: A stone in the ureter usually comes from the kidney. Urolithiasis is the third most common disease of the urinary tract which is surpassed only by urinary tract infections and pathologic conditions of prostate. There are some controversies on the effectiveness of extracorporeal shock wave lithotripsy (ESWL) and ureteroscopic lithotripsy (URSL) in ureteral stones. We aim to compare the efficacy of ESWL and URSL in the management of upper ureteric stones in terms of stone clearance.

Materials and Methods: This prospective hospital based study included patients with upper ureteric calculus managed with URSL with DJ stenting or ESWL at Dhulikhel Hospital-Kathmandu University Hospital from August 2014 to December 2015. Stone size, stone clearance, number of sittings, complications and need of other procedure were recorded.

Results: Total number of patients undergone ESWL was 49 and URSL was 48. There was no difference in male/female ratio, age and stone diameter between two groups ($P>0.05$). Total stone-free ratio was 85.71%(42/49) for ESWL and 81.25%(39/48) for URSL, partial fragmentation requiring shift of modality of treatment was 12.24%(6/49) for ESWL and 12.5%(6/48) for URSL, failed procedure was 2.04%(1/49) for ESWL and 6.25%(3/48%) for URSL($P= 0.577$).

Conclusion: ESWL is as effective as URSL in the management of upper ureteric calculus with no significant difference in age, male/female ratio, stone diameter and stone free ratio.

Key words: ESWL: Extracorporeal Shock Wave Lithotripsy, URSL: Ureterorenoscopic Lithotripsy, Upper ureteric calculus.