

In situ extracorporeal shock wave lithotripsy for primary ureteric calculi.

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Abstract

OBJECTIVE: To determine the efficacy of the Lithostar lithotripter for the in situ treatment of primary ureteric stones.

METHODS: We reviewed, retrospectively, our experience with 283 patients with primary ureteric stones treated with extracorporeal shock wave lithotripsy (ESWL) using the Lithostar lithotripter. No attempts were made to manipulate the stones. The majority of the patients were treated using only intravenous analgesia. Auxiliary measures were used in 84 patients (29.6%). There were 112 patients (39.6%) with upper, 53 (18.7%) with middle, and 118 (41.7%) with lower ureteric stones.

RESULTS: A single ESWL session was needed for 200 patients (70.6%), two for 49 patients (17.3%), and more than two sessions for 34 patients (12%). Of the 248 patients who had adequate follow-up, 220 (88.7%) were stone free, 14 (5.65%) had some residual stone, while 14 (5.65%) patients failed to respond to the treatment. Patients' gender and body weight influenced the treatment and the clearance rate numerically without any statistical significance. The stone site was the most significant factor influencing the final result. Stones larger than 10 mm and the presence of hydronephrosis adversely affected the treatment.

CONCLUSIONS: In situ ESWL of ureteral stones with the Lithostar device is a convenient and efficient method of treating calculi within the whole length of the ureter without the need for any manipulation