

A descriptive study of urolithiasis in patients admitted to professorial surgical unit of Teaching Hospital, Jaffna

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Introduction Urolithiasis is one of the most common urinary tract disorders. Various treatment options are available and the precise treatment approaches depend on various factors.

Objectives To assess the demographic details, clinical presentation and management of urolithiasis in patients admitted to the professorial surgical unit of Teaching Hospital, Jaffna.

Methods It was a descriptive study carried out at the professorial surgical unit, Teaching Hospital, Jaffna from January 2022 to April 2022. Data were collected including demographic details, clinical presentation, and management of urolithiasis. Descriptive statistics were analyzed for categorical and numerical variables using SPSS 26.0. Pearson's correlation was used to determine whether there was any correlation between variables. P value ≤ 0.05 was deemed statistically significant.

Results Out of 132 patients, eighty (60.61%) were males. Patients ranged in age from 17 to 83 years, with a mean age of 49.39 ± 15.54 years. The commonest presenting symptoms were pain (n=85, 63.64%) followed by lower urinary tract symptoms (12.12%, n=16), asymptomatic (14.39%, n=19), obstructed infected kidney (9.85%, n=13) and visible haematuria (8.33%, n=11). Majority (n=77, 58%) had comorbidities such as diabetic mellitus (n=38), hypertension (n=51), and hyperlipidemia (n=11) respectively. 81.82% (n=108) of patients had single stones. The commonest site of stones was on the left (n=52, 39.39%), followed by right (n=50, 37.88%), bilateral (n=20, 15.15%) and bladder (n=10, 7.58%). 48.48% (n=64) presented with renal and pelvic ureteric junction stones (mean size of

22.59±21.21mm), 28.03% (n=37) with ureteric stones (mean size of 23.19 ±21.42 mm) followed by concurrent renal with ureter stones (15.91%), bladder stones (6.06%) and bladder with ureter stone (1.52%). There was no significant correlation between the size of stones and patients' age (Pearson $r = 0.057$, $p=0.519$). The majority (n=88, 66.67%) were treated surgically, whereas 42.42% (n=56) underwent rigid ureteroscopy with laser lithotripsy.

Conclusion Males were mostly affected with urolithiasis. The pain was the more common presenting symptom and the majority had metabolic comorbidities. Renal and pelvic ureteric junction stones were more common and most of the patients were surgically treated.