

Pattern of urolithiasis among patients with urolithiasis at Teaching Hospital Jaffna

Piriyanthu T¹, Sobika S¹, Kumar R², Ambalavanar DC³, Coonghe PAD²

¹*Faculty of Medicine, University of Jaffna*

²*Department of Community and Family Medicine, Faculty of Medicine, University of Jaffna*

³*Department of Surgery, Faculty of Medicine, University of Jaffna*

Background: Urolithiasis or calculus formation in the urinary collecting system affects 1 to 15 percent of the population globally. Urolithiasis can be described based on the size of stones, the location of the stone, recurrence and clinical presentation. Despite accounting for a large number of admissions to Teaching Hospital Jaffna, little is known about the pattern of urolithiasis in Jaffna. This study aimed to describe the pattern of urolithiasis among patients with urolithiasis admitted to Teaching Hospital Jaffna.

Methodology: An institution-based cross-sectional study was carried out among patients admitted with urolithiasis between November 2017 and January 2018 to the surgical wards of Teaching Hospital Jaffna. Data were collected using an interviewer-administered questionnaire, data extraction form and standard anthropometric measurements. Data were analyzed using descriptive statistics (percentages and proportions) with the help of SPSS (v.23).

Results: 116 patients with urolithiasis participated in the study. The renal calyceal system (24.1%) was the most common site of stones followed by the renal pelvis (19%). For ureteric stones, the lower ureter (18.1%) was most common, followed by upper (17.2%) and middle ureter (18.1). Bladder stones accounted for 9.5%. Stones were more or less equally distributed between right and left side. Among the total 116 patients, only 60 patients had undergone either ultrasonography or computed tomography. The size of the stones was measured in this group. Among them, over 80 per cent had stones measuring >5 mm in size with 18.1%, 13.8% and 12.9% having stones of 5-10, 10-20, and >20mm, respectively. Of the total sample, 92.2% presented with pain, 48.3% dysuria, 31.9% frank haematuria, and 33.6% a recurrence of urolithiasis.

Conclusion: The pattern of urolithiasis in patients admitted to Teaching Hospital Jaffna is comparable to those from studies carried out in other tropical regions with similar rates of recurrence. Considering the prevailing hot climate and agriculture-based economy in northern Sri Lanka, our findings suggest that population-based studies of urolithiasis may be needed to guide prevention efforts.

Key words: urolithiasis, patterns, recurrence, Jaffna