

**OP-01****Outcome of ureteroscopy and laser lithotripsy in the management of ureteral stones at a tertiary care hospital in Jaffna**

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**Introduction:** Ureteroscopy is the commonest treatment modality for urolithiasis, and its efficacy and safety are improving as technologies continue to evolve.

**Objective:** The objective of the study was to evaluate the outcome of ureteroscopy and laser lithotripsy for the management of ureteral stones in a single surgical unit at a tertiary care hospital

**Methods:** A prospective study was conducted on patients with ureteral stones who were admitted to the professorial surgical unit of Teaching Hospital Jaffna for ureteroscopy with laser lithotripsy from December 2021 to April 2022. Data collected included demographic information, stone size, stone site, and complications. SPSS (v26) was used to carry out univariate and bivariate analyses.

**Results:** A total of 112 patients were treated with ureteroscopy during the study period, with a mean age of 47.3 (SD 15.0, range 13-76) years. Seventy-six patients (67.9 %) were males. The mean size of the stone was 15.4 (SD 6.58, range 4.5-35) mm. Stones were located in the right ureter, left ureter, and bilateral ureters in 54 (48.2%), 50 (44.6%), and 8 (7.1%) patients, respectively, whereas 59 (52.7%) had proximal ureteral stones, 34 (30.3%) distal ureteral stones, and 19 (17.0%) mid ureteral stones. Eighty-nine patients (79.5 %) were treated only with rigid ureteroscopy and laser lithotripsy, while 23 (20.5%) required additional procedures such as flexi-ureteroscopy with retro-integrated renal lithotripsy (n=17, 15.2%) and percutaneous nephrolithotomy (n=6, 5.4 %). The majority in the sample had retrieved stone fragments that were sent for stone analysis (n=76, 67.9%). In the post-operative analysis, 4.5% (n=5) had Clavien Dindo grade II complications due to postoperative fever, treated with an intravenous antibiotic.

No Clavien Dindo III, IV, and V complications were detected in the sample. In total, 26.8% (n=30) had stent-related symptoms (dysuria, haematuria, loin pain, and/or lower urinary tract symptoms).

**Conclusion:** Rigid ureteroscopy is a safe and effective treatment modality for ureteral stones in any location, and it is also a feasible approach with better outcomes. However, a minority need additional treatment with flexi ureteroscopy or percutaneous nephrolithotomy.

**Keywords:** Ureteroscopy, Ureteral stones, Outcome