

Section: SURGERY

Abstract: CIR-03

Efficacy of alpha-blockers in ureteral access sheath placement: Prospective trial and evidence of failure rate overestimation

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INTRODUCTION: Renal lithiasis affects approximately 8.8% of the population, with recurrence rates of up to 50% within 10 years. Flexible ureteroscopy, refined since the 1970s, provides high stone-free rates and low morbidity. The ureteral access sheath optimizes the procedure, but its placement may fail. Alpha-blockers such as tamsulosin relax ureteral smooth muscle and may theoretically facilitate this step. **OBJECTIVE:** To assess whether prior use of alpha-blockers increases the success rate of ureteral access sheath placement, reduces the need for double-J stenting, and decreases ureteral injuries. **METHODS:** Prospective randomized clinical trial including patients over 18 years of age with indication for flexible ureteroscopic lithotripsy, excluding pregnant women, patients with previous ureteral surgery, or chronic alpha-blocker use. The intervention group received tamsulosin for 7 days prior to surgery. All procedures followed a standardized protocol, with recording of sheath placement success and ureteral injury occurrence. **RESULTS:** Interim analysis with a case number below the planned sample size. The sheath placement success rate was 98.1%, with failure in only 1.9%, regardless of tamsulosin use. This value exceeds success rates reported in the literature, where failure ranges from 4% to 22%, suggesting historical overestimation associated with operator variability, larger sheath sizes, lack of technical standardization, and unfavorable anatomy. No significant differences were found between groups in the incidence of ureteral injuries or need for double-J stenting. **CONCLUSION:** Interim results did not confirm a benefit of alpha-blocker use in facilitating ureteral access sheath placement. The observed success rate (98.1%) was substantially higher than reported in contemporary series, indicating that with a standardized technical protocol, smaller sheaths, hydrophilic guidewires, and selective dilation, failure rates far below those historically reported are achievable. Continuation of the study will be essential to confirm these findings and assess whether alpha-blockers provide additional impact on clinical outcomes.

KEYWORDS: Renal lithiasis; Flexible ureteroscopy; Alpha-blockers.