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**Introduction & Objectives:** Flexible ureterorenoscopy (fURS) is increasingly used for the treatment of upper urinary tract stones. Ureteral access sheaths (UAS) have been introduced to facilitate retrograde access into the kidney, extraction of fragments and to decrease intrarenal pressures during the procedure. The objective of this study is to compare the efficacy and safety of fURS with and without UAS in the treatment of upper urinary tract stones.

**Materials & Methods:** A prospectively collected database of 170 fURS procedures carried out between January 2016 and December 2018 was analyzed. fURS without UAS was performed in 28 (16.5%) cases and with UAS – in 142 (83.5%). Preoperative characteristics, efficacy and safety were compared between groups.

**Results:** Patients' preoperative characteristics were comparable between groups, except for mean stone size, which was significantly larger in the UAS Group ( $11.9 \pm 3.0$  vs  $16.2 \pm 5.6$  mm;  $p < 0.001$ ), and the higher incidence of preoperative stent JJ in the UAS Group (7.1% vs 22.1%,  $p = 0.145$ ). Stone-free rates after single procedure were similar between groups (85.7% vs 83.8%,  $p = 0.800$ ). Mean operative time was significantly longer in the UAS Group ( $41.2 \pm 11.2$  min vs  $53.3 \pm 19.4$  min;  $p = 0.002$ ). Postoperative kidney drainage with ureteral stent JJ was more common in the UAS Group – 17.9% vs 56.3%,  $p < 0.001$ . There were no statistically significant differences in the rate of intra- and postoperative complications between groups (0% vs 0.7%,  $p = 0.656$  and 7.2% vs 11.9%,  $p = 0.758$ , respectively).

**Conclusions:** The results of this study suggest that the use of UAS has no impact on fURS efficacy and does not correlate with increased incidence of intra- and postoperative complications.