



## FP25

### Dust vs. extractable fragments: holmium laser lithotripsy mode

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**Objective:** Pyelocaliceal calculi flexible ureteroscopic approach raises problems related with operative time, associated morbidity and costs, especially by potential endoscope damage.

**Materials-Methods:** 5 series, each of 20 patients with single pyelocaliceal lithiasis were analyzed: Group I with calculi < 1 cm fragmented to dust, Group II with calculi < 1 cm with lithotripsy in fragments, Group III with calculi of 1-2 cm fragmented to dust, Group IV with calculi of 1-2 cm with lithotripsy in fragments, Group V with calculi of 1-2 cm fragmented to dust until they reached 1 cm, and lithotripsy in fragments afterwards. In all cases were used a flexible Story Flex-Xc ureteroscope and Ho:YAG lithotripsy.

**Results:** Ureteral access sheath was used in 70% of the cases. Mean stone volume in groups I and II, and groups II, IV and V were similar. Success rate in all groups was statistically similar. Mean operating time was 39 min in group I, 21 min in Group II, 112 min in group III, 72 min in group IV and 51 min in group V. Minor complications occurred in 7 cases, while a single major complication occurred in group IV.

**Conclusion:** The optimal lithotripsy method of calculi < 1 cm seems to be in extractable fragments. Larger calculi should be fragmented to dust until they reach 1 cm and then the lithotripsy should be continued into extractable fragments.