

**FP23****Improved durability of digital flexible ureteroscopes**

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**Objective:** New digital flexible ureteroscopes offer certain advantages by comparison to their predecessors. We aimed to retrospectively analyze the ureterorenoscopic procedures performed with the Storz Flex-Xc in order to evaluate its particularities.

**Materials-Methods:** Between May 2012 - April 2014, all the flexible ureteroscopic procedures performed with Storz Flex-Xc were analyzed. Five ureteroscopes were used: the first and last ones previously used in another center and 3 new ones.

**Results:** 558 procedures were performed on 510 patients: first endoscope used on 62 procedures (55 patients), second one on 96 procedures (90 patients), third one on 151 procedures (139 patients), the fourth on 159 procedures (143 patients) and the last one, still operational on 200 procedures (173 patients). Ureteral access sheath was used in 71% of the cases. The endoscopes were used for 51, 67.1, 107.7, 107.2 and 142.3 hours, respectively. Ureteral access sheath was used in 82% of the cases, and relocation of the lower pole stones was performed in all cases when it was possible. Difficulties to effectively access the stone were encountered in 0.4% of the cases. Overall stone free rate was 92.8% after one, 96.9% after two and 97.8% after three procedures. Major repairs were needed after optical system chip failure (first endoscope), significant damages of the outer coating (second one) and severe deterioration of the deflecting mechanism (third and fourth endoscopes).

**Conclusion:** Storz Flex-Xc seems to be an effective and durable flexible ureteroscope. We managed to use it in a record number of cases by comparison to the published data.