

## بحث رقم ( ٦ )

Prospective comparative study between the effect of CIDEX® OPA and STERRAD NX on the durability of digital flexible ureteroscope.

بحث منشور بمجلة :

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### الملخص الأنجليزي

#### Purpose

We compared the effect of chemical disinfection (CIDEX® OPA) and low-temperature hydrogen peroxide gas plasma (STERRAD NX) on two brand new digital flexible ureteroscope (DFU) (Flex-Xc) using subjective and objective parameters.

#### Patients and Methods:

Over 11-month period, all flexible ureteroscopic procedures that fulfill the inclusion criteria were done by two brand new flexible ureteroscopes and were prospectively evaluated. Intraoperative data included total operative time, laser power and duration, stone criteria and subjective evaluation of the procedure as well as visibility and maneuverability scores were reported. The end point of the study was when the scope was deemed by the surgeon as unable to perform the procedure; when leak test is positive.

#### Results:

A total of 88 patients were randomized either for the first flexible ureteroscope disinfected using Cidex® OPA (n = 59, 67%) or second ureteroscope sterilized with Sterrad NX (n = 29, 33%). Intraoperative, the first DFU was significantly used with a total operative time of approximately 49 h compared to the second one (p < 0.001). In the same context, laser power parameters were significantly different among the two groups (p = 0.003). The subjective evaluation of the procedure,

maneuverability, visibility scores, laser duration, stone burden and post-operative infection rate were statistically insignificant between both groups. At the end point of the study, the deflection in up and downward directions for both DFU were measured.

### Conclusions

The durability and longevity of the DFU is strongly related to the sterilization method. Our findings suggest that CIDEX® OPA should prioritize Sterrad in sterilization of DFU.