A NOVEL DEVICE TO REDUCE TIME REQUIRED IN IRRIGATION MANAGEMENT DURING SEMI-RIGID URETEROSCOPIC LITHOTRIPSY

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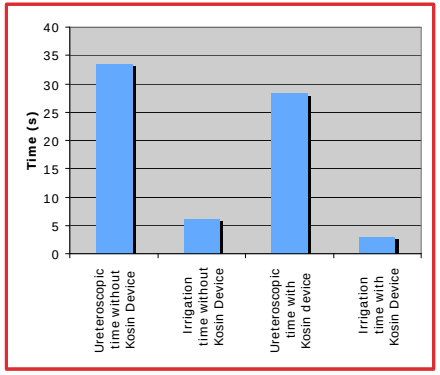
Introduction

Control of irrigation fluid during ureteroscopy and lithotripsy consumes approximately twenty percent of the operative time. The objective of this study was to evaluate a more efficient control of irrigation fluids; therefore, reducing the operative time required to treat ureteral calculi endocopically.

Methods

Semi-rigid ureteroscopy performed with the pressure-bag irrigation was evaluated for intraoperative time required to control irrigating fluids during an ureteroscopic lithotripsy. The percentage of total operative time was calculated comparing the standard procedure of stopcock adjustment to using the Classic Universal Piggyback Irrigation System produced by Kosin Technologies.



Results

Time required to manage irrigating fluids in the standard stopcock fashion was compared to utilization of the Kosin device. Operative irrigation showed a reduction from approximately 20 percent to 10 percent of the total operative time. Reduction in operative time was directly attributed to better fluid management, better visibility and increased dexterity. Added benefits were the ability to leave one hand available continuously for lithotripsy treatment. Less time required pursuing stone fragments due to over aggressive irrigation.

Conclusion

Better fluid management using a device that is structurally attached to the semi-rigid ureteroscope allows for one hand manipulation of both the scope and irrigation fluid, allowing the second hand to be directed to the lithotripsy management. Reduction in operating time is directly related to decreased fluid management time, better visibility and less stone migration because of better control of fluid management.