

USE OF LIGHTED URETERAL STENTS IN LAPAROSCOPIC BOWEL SURGERY

Jerry Trulson (M-4)
Julie Riley, MD (R-5)

(Mark Wakefield, MD)

School of Medicine, Department of Surgery, Division of Urologic Surgery
Scott Troxel, MD

School of Medicine, Department of Surgery, Division of Urologic Surgery
Klaus Thaler, MD

School of Medicine, Department of Surgery, Division of General Surgery

Introduction: Previous reports have confirmed the benefit of ureteral stent placement prior to colon resection. Stryker introduced InfraVision Ureteral Kit (UKIT) to assist in identification of the ureters during laparoscopic surgery. We present our first experience with these stents.

Methods: A retrospective analysis was performed on our first 20 patients undergoing laparoscopic colorectal resection with lighted ureteral stent placement using UKIT. Four attending urologists performed all stent placements. Study end points were feasibility and safety of stent placement and stent visibility during laparoscopy.

Results: A total of 29 stent placements were attempted with 25 being successful. Four were unable to be placed due to technical difficulties with the stent itself. Two patients required ureteroscopy to assess potential injury to the ureter, and 3 patients required indwelling double-J stents. Two stents required a wire to be placed in order to position the stent. One stent was palpated during laparoscopy, but no light was emitted. All others were visually identified. Indications for colon resection included cancer and diverticulitis. No ureteral injuries occurred during colon resection.

Conclusion: The UKIT is a feasible means of placing ureteral stents during laparoscopic colon surgery. When successfully placed, it has the potential to facilitate identification of the ureters and dissection of the colon. However, insertion can be difficult and there is the potential for injury. Future studies are needed to better clarify the risks and benefits of placement and potentially modify the catheter design.