Dual Usage of 5 mm Laparoscope for Abdominal Entry and Cystoscopy During Robotic Assisted Laparoscopic Hysterectomy: Safe Alternative to Traditional Cystoscopy

Amirlatifif N, Aalami-Harandi P, * Day B. OB/GYN, St. Joseph’s

Objective: To assess whether dual usage of 5 mm laparoscope for both abdominal entry and cystoscopy during robotic assisted laparoscopic hysterectomy (RALH) affects the incidence of urinary tract infection (UTI).

Interventions: Dual usage of 5 mm laparoscope (0-degree) for abdominal entry and cystoscopy during RALH. During this procedure, the bladder was backfilled with 180 ml of sterile water using a 60 ml syringe; the catheter was removed. The previously used laparoscope was introduced into the bladder and assessed. Efflux from both ureteral orifices was visualized. A urinary catheter was reinserted until surgery was completed.

Measurements/Results: Between 2016–2018, 45 patients who underwent RALH with cystoscopy by the same surgeon were reviewed. The median age of patients was 44 +/- 11 years with an average BMI of 32 +/- 17. The main indication for surgery was abnormal uterine bleeding or pelvic pain. All patients were treated pre-operatively with Phenazopyridine and antibiotics. No postoperative antibiotics were administered. No ureteral or bladder injuries were detected. During the first postoperative visit, 1–2 weeks after surgery, the patients were questioned regarding urinary symptoms and clean catch urine samples were analyzed. Urine culture was performed for patients with urinary symptoms or positive leukocytes on urine test strips. Patients were evaluated based on risk factors for UTI such as diabetes (13%), obesity (42%) and smoking status (11%). Of 45 patients, 7 patients were empirically treated with antibiotics, and 1 resulted in a positive urine culture (2.2%). Therefore the rate of UTI (2.2%) is comparable to the 5%–10% reported incidence of UTI post cystoscopy [p-value = .0299].

Conclusions: The dual use of the 5 mm laparoscope for both abdominal usage and cystoscopy during RALH does not increase the rate of UTI and is a safe alternative to traditional cystoscopy.