

## URETEROSCOPIC URETERAL STENTING OF URETEROVAGINAL FISTULA FROM ROBOTIC AND LAPAROSCOPIC GYNECOLOGICAL OPERATIONS

### Hypothesis / aims of study

Iatrogenic ureteral injuries are among the most serious complications in gynecologic surgery. With the increasing popularity of laparoscopic and robotic gynecologic surgery, the incidence of ureteral injuries is on the rise. This study was aimed at evaluating the minimal invasive approach and endourological techniques in female patients with iatrogenic ureterovaginal fistula.

### Study design, materials and methods

The present retrospective study included 12 patients (mean age: 60.9 years, range: 48–69) who were managed with retrograde stenting using ureteroscopy for ureterovaginal fistula. The diagnosis was based on clinical presentation, double dye test, cystoscopy, and excretory urography. The preoperative characteristics and the intra- and postoperative data were assessed by reviewing the operative notes, medical records, and office notes.

### Results

Between July 2012 and October 2014, twelve women underwent ureteroscopic ureteral stenting. The mean (range) interval between surgery and the diagnosis of presence of incontinence was 21.4 (10–65) days. Retrograde stenting was successfully performed in all patients, using a 8Fr semi-rigid ureteroscope. Eleven patients became continent the day after surgery. One had urinary incontinence 2 weeks after surgery, which the injured site was at ureterovesical junction. Three patients showed ureteral stricture in urography which was performed at 4 weeks after the stent removal. These patients were all cured after transurethral balloon dilation of the stricture site.

### Interpretation of results

Ureteroscopic stenting can be an effective method to manage ureterovaginal fistula which is a complication from robotic and laparoscopic gynecological operations.

### Concluding message

The majority of ureterovaginal fistula can be successfully managed by ureteroscopic stenting. Our study also suggests that an attempt of ureteroscopic stenting should be considered in all patients with ureterovaginal fistula before subjecting them to other modalities.

### Disclosures

**Funding:** None **Clinical Trial:** Yes **Public Registry:** No **RCT:** No **Subjects:** HUMAN **Ethics Committee:** PNUH-IRB Helsinki: Yes **Informed Consent:** Yes