

# Laparoscopic Repair of Ureterovaginal Fistula: Successful Outcome by Laparoscopic Ureteral Reimplantation

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## ABSTRACT

We describe our technique of laparoscopic repair of ureterovaginal fistula in a 34-year-old woman who developed a vaginal leak of urine 15 days after laparoscopic hysterectomy. Laparoscopy and extravesical ureteral reimplantation with a stent was carried out. Cystoscopy and stent removal was done after 6 weeks. The patient was dry. To our knowledge, laparoscopy for the repair of ureterovaginal fistula has not been described. This distressing condition can be corrected laparoscopically with obvious benefit to the patient.

## INTRODUCTION

**A**MONG GENITOURINARY FISTULAS, ureterovaginal fistulas are uncommon. Most of them are secondary to unrecognized injuries of the ureter sustained during gynecologic procedures, the most common being hysterectomy (vaginal, abdominal, or even laparoscopic). Usually, they present with clear drainage per vagina with unilateral hydronephrosis and flank pain. Repair is accomplished by various methods, depending on the site of the fistula, the nature of the disease, and the presence of malignancy or history of radiotherapy. Injuries to the ureter recognized at the time of laparoscopic surgery have been repaired laparoscopically. To our knowledge, however, established ureterovaginal fistulae have not been repaired in this way.

## CASE REPORT

A 34-year-old woman presented with vaginal leak of urine and right flank pain 15 days after a difficult laparoscopic hysterectomy for fibroids of the uterus. Renal parameters were normal, and the urine was sterile. Ultrasound scanning revealed right hydronephrosis. An intravenous urogram showed a delayed nephrogram and pyelogram; moderate hydronephrosis and obstruction and leak of the contrast medium at the level of the right ischial spine were apparent. Cystoscopy confirmed the absence of a vesicovaginal fistula. A right ureteral catheter could be passed only up to 2 cm, and hence, stenting was not possible (Fig. 1). As her previous surgery was laparoscopic, the patient



**FIG. 1.** Preoperative urogram shows right-sided hydronephrosis and extravasation of contrast above right ischial spine.