



Laparoscopic Treatment of Vesicovaginal Fistula

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ABSTRACT

Introduction: Vesicovaginal fistula is a rare disease with great impact for the patients. Laparoscopic repair can be an interesting option in selected cases with good results but few experience is reported.

Objectives: Detailed demonstration of our laparoscopic vesicovaginal fistula repair technique. Initial results for ten patients are provided. **Methods:** We treated all cases by the same technique. The surgical steps were: Patient positioning in Lloyd-Davis; Cystoscopy and implant of guide wire on fistula and ureteral catheters (that was removed after procedure); Transperitoneal access and 4 or 5 ports in V or W shape; Opening the bladder wall; Dissection between bladder and vagina for tension free repair; Fistula resection; Vagina repair with Vicryl 3-0; Bladder repair with Vicryl 3-0; Peritoneum/omentum interposition; Positioning 20 Fr urethral catheter.

Results: Mean age was 50 years. Mean number of fistulas was 1,2. The most common etiology was gynecologic surgery (7). Mean operative time was 2,5 (1,8-3,2) hours. Mean blood loss was 150 (100-200)mL. Complication rate was 10% (one case of urinary infection treated conservatively). Mean hospital stay was 1,2 (1-2) days. Mean return to normal and activities was 20 (15-30) days. For nine patients mean sexual intercourse time was 3 (1-6) months. Success rate after 1 year was 90% (one case of recurrence in patient with previous radiotherapy). Mean follow-up was 36 (12-60) months.

Conclusions: Laparoscopic repair is feasible, reproducible and present all advantages of minimally invasive surgical procedure. Long term results are similar to conventional open approaches.

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EDITORIAL COMMENT

Vesicovaginal fistula is a potentially devastating complication. Repair of vesicovaginal fistula can prove challenging especially if the patient has received radiotherapy or the fistula is recurrent and/or large. Many vesicovaginal fistulae can be treated using a transvaginal technique (1,2). The video by Tobias et al nicely depicts a laparoscopic technique that utilizes all the components of the

open O'Connor technique. Specifically, a transperitoneal approach to open the bladder, followed by excision of the fistula tract, dissection of the bladder off of the vagina with separate closures and omental interposition are used (3). This approach does require advanced laparoscopic skills. In their series with intermediate follow-up they are able to achieve excellent success rates. Their patients seemed to benefit from the laparoscopic approach as they were able to go home within 1-2 days.

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