

## **Laparoscopic Vesicovaginal Fistula Repair: Report of Five Cases, Literature Review and Pooling Analysis**

**Introduction and Objective:** To assess the safety and efficacy of laparoscopic repair of vesicovaginal fistula (VVF) by literature review and pooling analysis and likewise, we are going to report the first experience of using this approach in a patient with history of radiotherapy.

**Materials and Methods:** Five patients with VVF including one patient with previous history of cervical cancer and radiation underwent laparoscopic repair from August 2010 to Dec 2011 by one experienced surgeon. None of the patients had history of VVF repair and all of them underwent laparoscopic repair of VVF using O'Connor technique. The bladder was bivalved from dome to the fistula orifice by scissor. Fistula tract was excised and then vagina and bladder were dissected. Vagina and bladder were repaired by 2-0 vicryl suture using running pattern in one layer. At the end of procedure, 18 Fr urethral catheter was fixed and suprapubic tube was not used.

**Results:** Surgical procedure was uneventful in all of the patients and conversion to open did not happen. Mean operative time was 134 (100-185) minutes. Average blood loss was 300 (250-370)ml and no one required a blood transfusion. Mean hospital stay was 4 (3-6) days. Laparoscopic repair was successful in 4 cases at the mean 8 (2-15) months follow-up even in a patient with radiation history. Recurrence occurred in one case that underwent repeat laparoscopic repair, and two month follow-up revealed no fistula.

**Conclusion:** Laparoscopic surgery may be a good alternative for open approach for managing even complicated VVF, if this experience is performed by highly skilled surgeons.