

# Laparoendoscopic single site surgery for extravesical repair of vesicovaginal fistula using conventional instruments: Our initial experience

## Abstract

**Objective:** Vesicovaginal fistula (VVF) is a major complication with psychosocial ramifications. In literature, few VVF cases have been managed by laparoendoscopic single site surgery (LESS) and for the 1(st) time we report VVF repair by LESS using conventional laparoscopic instruments. We present our initial experience and to assess its feasibility, safety and outcome.

**Patients and methods:** From March 2012 to September 2015, LESS VVF repair was done for ten patients aged between 30 and 65 ( $45.6 \pm 10.15$ ) years, who presented with supratrigonal VVF. LESS was performed by modified O'Conor technique using regular trocars with conventional instruments. Data were collected regarding feasibility, intra- or post-operative pain, analgesic requirement, complication, and recovery.

**Results:** All 10 cases were completed successfully, without conversion to a standard laparoscopic or open approach. The mean operative time was  $182.5 \pm 32.25$  (150-250) min. The mean blood loss was 100 mL. The respective mean visual analog score for pain on day 1, 2, and 3 was  $9.2 \pm 1$ ,  $5 \pm 1$ , and  $1.4 \pm 2.3$ . The analgesic requirement in the form of intravenous tramadol on days 1, 2, and 3 was  $160 \pm 51.6$ ,  $80 \pm 63.2$ , and  $30 \pm 48.3$ , mgs respectively. No major intra- or post-operative complications were observed. The mean hospital stay was  $2.6 \pm 0.7$  (2-4) days.

**Conclusion:** In select patients, LESS extravesical repair of VVF using conventional laparoscopic instruments is safe, feasible with all the advantages of single port surgery at no added cost. Additional experience and comparative studies with conventional laparoscopy are warranted.