

CORRECTION OF POST-BIRTH-TRAUMA URETHROVAGINAL FISTULA ASSOCIATED WITH SUI BY THE USE OF MARTIUS FALP AND ANTERIOR VAGINAL WALL SLING

Hypothesis / aims of study

Determination of the short term efficacy, safety and urodynamic effects of the use of Martius flap and anterior vaginal wall sling in treating post-birth-trauma urethrovaginal fistula associated with stress urinary incontinence.

Study design, materials and methods

Nine patients with post-birth-trauma urethrovaginal fistula associated with stress urinary incontinence (ISD) underwent repair of the fistula by fistulectomy, closure of the urethra with Vicryl 4/0 sutures and insertion of a Martius flap. SUI was corrected by modified anterior vaginal wall sling. The fistulous site ranged from 1-2 CM distal to the bladder neck. The procedure was done 3-6 months after birth trauma (mean was 4.4 months). Preoperative evaluation consisted of history, voiding diary, examination, abdominopelvic ultrasonography, IVU, cystourethrography, conventional urodynamic studies, and routine laboratory investigations. Cystoscopy was done intraoperatively to assess the fistula, the presence of other fistulas, and the bladder neck. Patients were followed (for a mean of 15 months) by history, examination, urine analysis, pelvic ultrasound to detect residual urine, and conventional urodynamic studies at 3 months post-operatively.

Results

All procedures were completed with no intraoperative complications; failures or recurrences of stress incontinence or fistula. One patient (11%) complained from sensory urge incontinence postoperatively and was managed with anticholinergics.

Interpretation of results

Urethrovaginal fistulas lead to weakness of the urethral sphincter mechanism. Closure of the fistula with covering of suture line with Martius flap is very effective in treating fistulas but may not be effective in treating associated SUI. The use of anterior vaginal wall sling can correct associated SUI effectively to avoid the use of synthetic materials in a poorly vascularized area.

Concluding message

Preliminary results in our institution showed that the use of Martius flap and anterior vaginal wall sling in treating post-birth-trauma urethrovaginal fistula associated with stress urinary incontinence is safe, efficient, reproducible and a low cost technique.

<i>Specify source of funding or grant</i>	Government
<i>Is this a clinical trial?</i>	Yes
<i>Is this study registered in a public clinical trials registry?</i>	No
<i>What were the subjects in the study?</i>	HUMAN
<i>Was this study approved by an ethics committee?</i>	Yes
<i>Specify Name of Ethics Committee</i>	Local Ethics Committee at Bani Sweif University.
<i>Was the Declaration of Helsinki followed?</i>	Yes
<i>Was informed consent obtained from the patients?</i>	Yes