

LONG-TERM OUTCOMES FOLLOWING NON-RADIATED URETHROVAGINAL FISTULA REPAIR.

Hypothesis / aims of study

Urethro-vaginal fistula (UVF) is a rare condition and long-term results are lacking in the literature. We reviewed our UVF experience with an emphasis on long-term functional outcomes data.

Study design, materials and methods

Following IRB approval, the charts of women who underwent transvaginal UVF repair with minimum 6 months follow-up were reviewed. Exclusion included radiated fistulae. Extracted data included demographics, etiology, prior repairs, surgical repair procedure, secondary interventions, and functional outcomes. Surgical outcomes were assessed by validated questionnaires; Urogenital distress inventory (UDI-6), Impact on Incontinence questionnaire (IIQ-7), Female sexual function index (FSFI) and Visual analogue scale for QoL. Two groups were compared: (1) synthetic sling related versus (2) non-sling related UVF. Some women not seen for a while were contacted by phone and underwent a structured interview. Descriptive statistics were applied with $p < 0.05$ for significance

Results

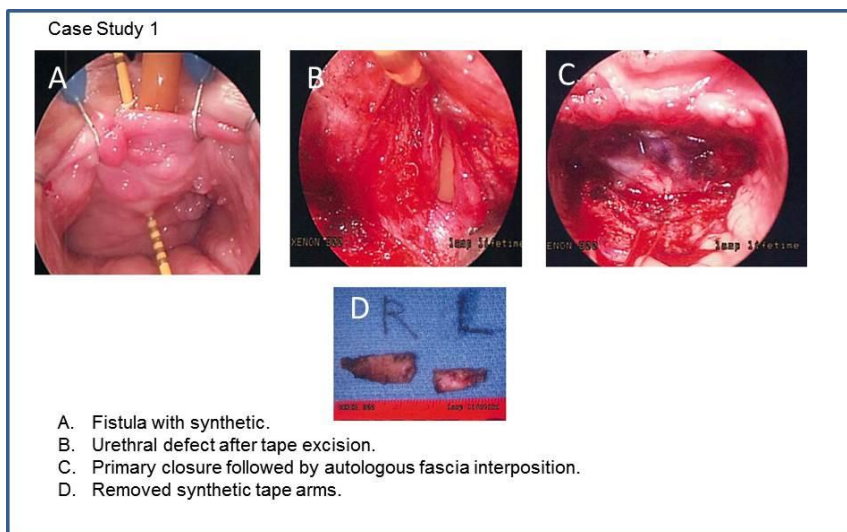
From 1996 to 2013, 18 patients underwent UVF repair with mean age of 46 years (range 20-66), BMI 29 (range 21-42) and mean follow-up at 51 months (range 6 -164). Overall repair success rate was 95%. One case of recurrence was in a renal transplant woman on immunosuppression who eventually required a cystectomy and ileal conduit. Size of UVF defect ranged from 1 mm (case 1) to larger defects up to 2 cm (case 2). Prior failed UVF repair was recorded in 11 patients (61%). Prior procedures in group 2 included urethral diverticulum repair in 2, pelvic trauma, injectable agent, bladder neck suspension, Renessa™ therapy. Fifteen women underwent primary closure using loupe magnification, and an autologous pubovaginal sling for tissue interposition as well as for continence repair. Three patients underwent primary repair only and 2 underwent an additional Martius labial fat pad graft. Not surprisingly, Group 1 numbers increased over the past 10 years. As shown in Table 1, there was no statistical difference on UDI-6 questionnaire outcomes between the two groups among responders for Q2 (UUI) and Q3 (SUI); but there was a statistical difference for Q4 small leak; 1.9 vs. 0.8 ($p=0.03$) and Q5 difficulty emptying; 1.3 vs. 0 ($p=0.02$). No differences in IIQ-7 were noted between the 2 groups ($p=0.14$). Of the 18 patients, 4 remained sexually active and of those, 2 responded to FSFI (50%) with low scores.

Interpretation of results

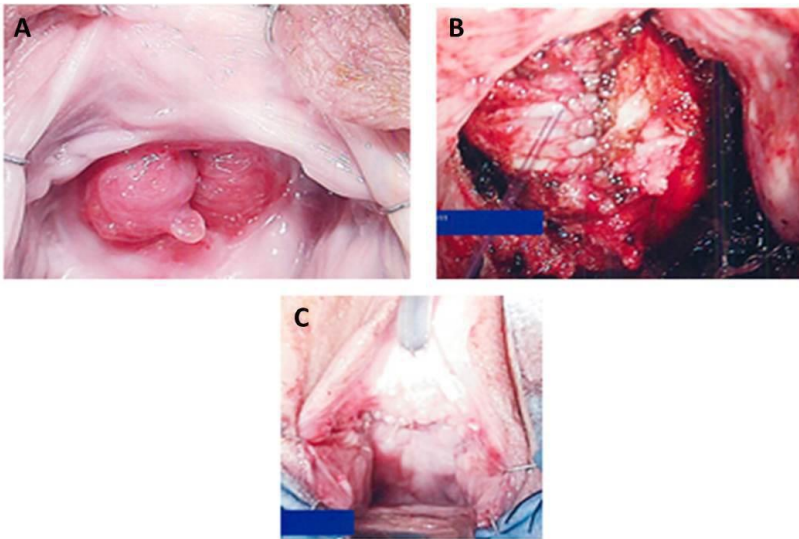
This large series of non-radiated UVF indicates a satisfactory outcome in UVF closure repair, but underscores residual changes in continence and voiding domains over time in a subset of women. Sexual function could not be fully explored due to the few women who have remained sexually active in this group.

Concluding message

Despite a high cure rate in closing UVF, long-term follow up at 4-5 years indicated some differences in lower urinary tract outcomes for continence and voiding domains, with the synthetic sling related group performing worse.



Case Study 2



A. Large uvf (2 cm). B. Primary closure C. Final result after fascial interposition

Table 1: Outcomes following Urethrovaginal Fistula (UVF) repair

| | UVF repair | | | p-value |
|-------------------------|-------------------|-----------------------|--------------------|---------|
| | Sling (n=9)/SD | Non sling (n=9)/SD | Total (n=18)/SD | |
| Anatomical closure (%) | 9 (100) | 8 (89) | 17 (95) | |
| UDI-6 (%) | 8 (89) | 4 (44) | 12 (67) | |
| Q1. Frequency | 1.4 (1.2) | 0.5 (1) | 1.1 (1.2) | 0.24 |
| Q2. Urge Leak | 1.8 (1) | 0.8 (1) | 1.4 (1) | 0.1 |
| Q3. Stress Leak | 1.3 (1.3) | 0.5 (0.6) | 1 (1.1) | 0.3 |
| Q4. Small Leak | 1.9 (1) | 0.8 (0.5) | 1.5 (1) | 0.03 |
| Q5. Emptying difficulty | 1.3(1.2) | 0 (0) | 0.8 (1.1) | 0.02 |
| Q6. Pain | 0.9 (1.4) | 0.3 (0.5) | 0.7 (1.1) | 0.4 |
| Total | 7.4(5.4) | 4.5 (2.1) | 6.8 (5) | 0.5 |
| IIQ-7 | 7.7 (11) | 1 (1) | 5.7 (9.2) | 0.14 |
| Visual Analog Scale | 4.8 (4) | 1.5 (0.6) | 3.7 (3.6) | 0.05 |
| Sexual Activity | | | | |
| No (%) | | | 10 (66) | |
| Unknown (%) | | | 4(22) | |
| Yes (%) | 2 (22) | - | 4(22) | |

Disclosures

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