

THE OUTCOMES OF FEMALE URETHROPLASTY WITH A SINGLE TECHNIQUE IN A CONSECUTIVE SERIES OF 19 WOMEN

Hypothesis / aims of study

The ideal management of female urethral strictures is unclear. We present the outcomes of ventral inlay graft urethroplasty (VIGU) in a consecutive case series.

Study design, materials and methods

Nineteen women (age: 37-75 years) with urethral stricture were treated with VIGU between 2011 and 2016. Fourteen women had previous urethrotomy and repeated dilatations. Four had percutaneous cystostomy due to obliterated urethral flow. Clinical work-up included subjective assessment with the AUA symptom score, uroflowmetry, voiding cystourethrography (VCUG), and intraoperative urethrocystoscopy. Fibrotic urethra was incised at six o'clock, extending 0.5-1 cm. towards the healthy proximal urethra/bladder neck (Figure 1). External meatus was divided in two women. A free graft was harvested from the labium minus (n=17) or the oral mucosa (n=2) to augment the urethral defect as ventral inlay (Figure 2). Urethral catheter was removed after 2 weeks. Postoperative follow-up was scheduled at 1st, 3rd, 6th months, and yearly thereafter. Failure was defined as the recurrence of stricture as determined by a need for additional intervention.

Results

Mean stricture length was 1.6 cm (1-3 cm) and mean graft length was 2.6 cm (1.5-4 cm). Seventeen (89.4%) women were cured at a mean follow-up of 30.7 months (range: 3 to 60). One patient had recurrence and received internal urethrotomy 8 months after surgery. Her stricture recurred 1 year later and a re-do VIGU using oral mucosa was done. Second patient had stricture at the proximal anastomotic site and was managed with dilatation at postoperative 4th month. At the last follow-up, mean Qmax (ml/sec) increased from 5.2±3.1 preoperatively to 22.1±6.9 postoperatively (p<0.001), mean AUA symptom score decreased from 25.7±3.9 preoperatively to 6.4±2.8 postoperatively (p=0.001). De-novo stress incontinence developed in one case after primary urethroplasty and in one case after re-do reconstruction.

Interpretation of results

VIGU successfully increased peak urinary flow rates postoperatively, in accordance with significant improvements in the subjective AUA symptom scores.

Concluding message

VIGU is a feasible option for the reconstruction of female urethral strictures. It provides straight-forward access to entire urethra through the vaginal route. There is a slight risk of de-novo stress incontinence after VIGU, especially in re-do cases.



Figure 1-. Fibrotic urethra was incised at six o'clock, extending 0.5-1 cm. towards the healthy proximal urethra/bladder neck.

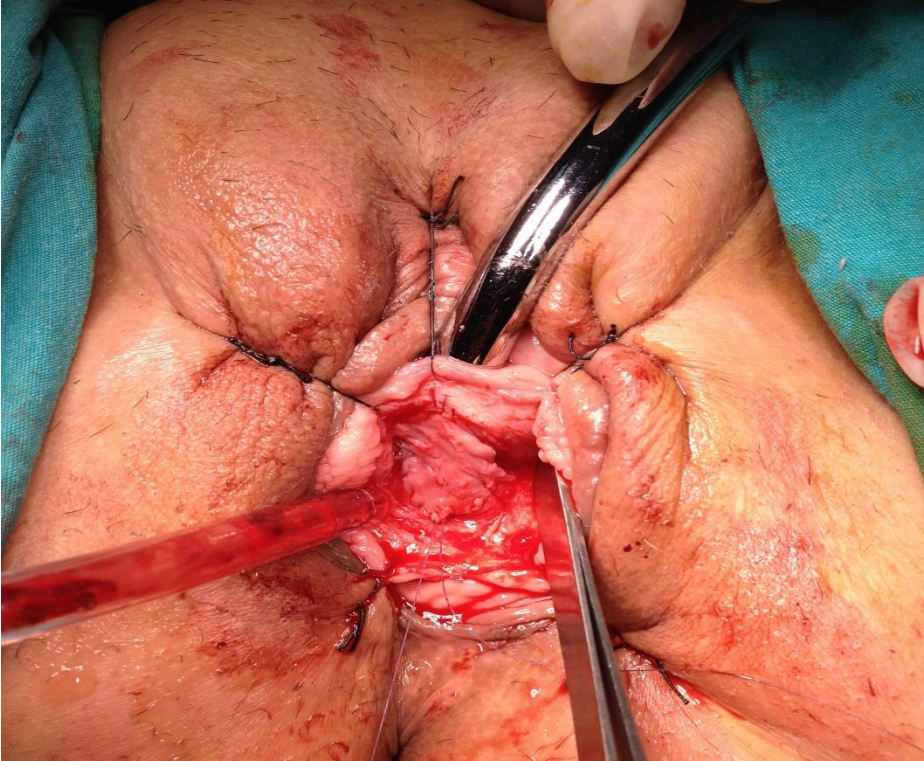


Figure 2- A free graft was harvested to augment the urethral defect as ventral inlay.

Disclosures

Funding: None **Clinical Trial:** Yes **Public Registry:** No **RCT:** No **Subjects:** HUMAN **Ethics Committee:** Ümraniye Training and Research Hospital Ethics Committee **Helsinki:** Yes **Informed Consent:** Yes