

MANAGEMENT OF URETHRAL STRICTURES IN WOMEN

Hypothesis / aims of study

To describe the diagnosis and treatment of urethral strictures in women.

Study design, materials and methods

This is a retrospective study of urethral strictures identified from a database of women seen between 1998-2010. Inclusion criteria included 1) a clinical diagnosis of urethral stricture, 2) stricture seen on cystoscopy, 3) urethral obstruction on videourodynamics (VUDS) according to the Blaivas-Groutz nomogram and/or 4) urethral calibration <17F. Pre- and postoperative symptoms, uroflow, and post-void residual urine were recorded for all patients; VUDS and cystoscopy were done preoperatively. Treatment was individualized. Post-operative recurrent stricture was defined by the same preoperative criteria.

Results

17 women ranging in age from 32-98 years (mean = 60) with urethral strictures were identified. The stricture was idiopathic in 8, iatrogenic in 7, and traumatic in 2. VUDS could not be done in 3 women due to complete obliteration of the urethra. 10/14 satisfied VUDS criteria for obstruction; 4 had impaired detrusor contractility. The site of obstruction was proximal urethra in 7, mid in 4, distal in 5 and panurethral in 1 patient. Eight women underwent vaginal flap urethroplasty (VFU) and one each had dorsal buccal mucosal graft and had primary urethral reconstruction without a flap or graft. 5 had concomitant biologic pubovaginal sling (PVS) and one a Martius flap. There were no recurrences at a minimum of 5 years follow-up, but one patient had sphincteric incontinence that required sling surgery. There were two recurrent strictures at 5½ and 6 years postop. One underwent dorsal buccal mucosal graft urethroplasty (BMG). The second recurrent stricture underwent ventral BMG and all were stricture free at 12-15 months post-op. 6/7 patients treated with urethral dilation recurred and required repeated dilations for the duration of their follow-up (.5-4 years; mean 2).

Interpretation of results

In selected patients, VFU and BMG have high success rates; 100% at 5 and 1 year respectively. Two strictures treated with VFU recurred at 5 & 6 years for an overall success rate of 88% suggesting long term follow-up is mandatory. Urethral dilation has a success rate of 14%. Salvage is possible with BMG urethroplasty.

Concluding message

VFU and BMG are the most promising options for the management of urethral strictures in women. Additional follow-up is needed to determine long-term outcomes of these procedures.

Disclosures

Funding: None. **Clinical Trial:** No **Subjects:** HUMAN **Ethics Committee:** Western Institutional Review Board **Helsinki:** Yes **Informed Consent:** Yes