Experience with Urethroplasty to Treat Urethral Strictures in Women

Hypothesis / aims of study: Female urethral stricture is an uncommon cause of bladder outlet obstruction and a rare clinical entity in women. Regardless the etiology, periurethral fibrosis is the final cause. There is no treatment consensus, but less aggressive maneuvers such as dilatations and urethrotomies are chosen to treat primary strictures, although the high recurrence. The objective of this study is to describe the experience with urethroplasty for the definitive management of urethral strictures in women.

Study design, materials and methods: In all, 19 women (mean age 48 years) with a history suggestive of urethral stricture who had undergone multiple urethral dilatations and/or urethrotomy were selected for urethroplasty after thorough evaluation, from January 2000 to January 2009. 16 (84%) patients were treated with an onlay vaginal flap and 3 (16%) with a ventral buccal mucosagraft. The choice of the surgical technique was related with the clinical aspect of the vaginal mucosal at the time of the procedure with a preference to vaginal flap when a healthy mucosa was observed.

Results: The preoperative mean maximum urinary flow rate of 6.0 mL/s increased to 29 mL/s, with a "normal" flow rate curve after a mean follow-up of 11.75 months. One patient required urethral dilatation to treat a submeatal stricture during 3 months and symptoms of stress urinary incontinence were observed in 2 patients (10.5%) and in one apubovaginal sling was performed with excellent results.

Concluding message: Reconstructive techniques (urethroplasty) with the use of flaps and grafts should be considered in recurrent cases of strictures in women as a simple, safe and effective approach with durable results.

Specify source of funding or grant: None

Is this a clinical trial? No

What were the subjects in the study? HUMAN

Was this study approved by an ethics committee? No

This study did not require ethics committee approval because: It's a retrospective study case series

Was the Declaration of Helsinki followed? Yes

Was informed consent obtained from the patients? Yes