

SUPRAMEATAL URETHROLYSIS WITH MARTIUS FLAP

Synopsis of Video

Technique: A semicircular incision is made between the urethral meatus and clitoris. The dissection is directed toward the periostium of the pubic symphysis 2 cm above the urethra. Bovey cautery is used to dissect the subcutaneous tissue directly on top of the pubic bone. A Heney retractor is placed superiorly to expose the pubic bone and a curved mayo with curved tip pointing up is passed directly under the bone to enter the retropubic space. Careful dissection frees the bladder from the pubis and lysis of adhesions with removal of residual mesh, if present, is performed. The urethra and bladder are dissected until completely free in the retropubic space. A Martius flap is harvested from the labia in the standard fashion and passed into the suprimeatal area to cover the bladder and urethra. The subcutaneous tissues are then re-approximated over the Martius flap and the vaginal skin is closed in an interrupted fashion.

Hypothesis / aims of study

Obstructive voiding and urinary retention are rare complications of anti-incontinence surgery. Transvaginal urethrolysis allows resumption of normal voiding in most circumstances; however, some patients remain obstructed despite multiple attempts at transvaginal urethrolysis. Clean intermittent catheterization (CIC) is not the only option. Suprameatal urethrolysis allows direct vision of the periurethral and retropubic space with ideal exposure for removal of foreign body or mesh in the retropubic space.

Study design, materials and methods

Retrospective analysis of the last 8 years of cases by one surgeon (SR) identified 12 cases of suprimeatal urethrolysis with Martius flap. Chart review was performed to assess presenting symptoms, prior surgery and subsequent procedures.

Results

12 cases of persistent obstruction requiring suprimeatal urethrolysis were identified. All 12 patients were referred from outside institutions and all had undergone between 1 and 4 attempted transvaginal urethrolyses prior to presentation. All patients had undergone retropubic anti-incontinence surgery as the etiology of their obstruction. All patients reported difficulty or inability to urinate volitionally and 10/12 patients were performing CIC on presentation. Post operatively, 11/12 patients were able to void >75% of bladder capacity and did not require CIC. In our series there was 1 failure requiring repeat suprimeatal urethrolysis, after which volitional voiding to completion was achieved. 33% of patients developed incontinence post operatively and all 4 patients underwent successful subsequent anti-incontinence surgery.

Interpretation of results

Suprameatal urethrolysis has been used successfully in patients with persistent obstruction after retropubic slings and failed transvaginal urethrolyses.

Concluding message

We recommend the use of the Martius flap to minimize recurrent scarring from the dissection in the retropubic space. The risk of recurrent incontinence is about 30%, however, these patients respond well to subsequent sling placement. We report a 92% primary success rate in our series.

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| 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? | Yes |
| Specify Name of Ethics Committee | UCLA Office for the Protection of Research Subjects Institutional Review Board |
| Was the Declaration of Helsinki followed? | Yes |
| Was informed consent obtained from the patients? | No |