

OUTCOMES AND COMPLICATIONS OF ANTEROMEDIAL SPHINCTEROTOMY IN FEMALES PATIENTS WITH VOIDING DYSFUNCTION.

Hypothesis / aims of study

To evaluate the efficacy of sphincterotomy in women diagnosed with voiding dysfunction.

Study design, materials and methods

We evaluated our established urologic urodynamic database and identified the records of female patients who had the diagnosis of voiding dysfunction and failed medical treatment therefore they underwent sphincterotomy between October 1993 to December 2008. (The report in male patients has recently published (1). We analyzed The International Prostate Symptom Score (IPSS), Blaivas nomogram and complete urodynamic study before and at six months after the procedure. The follow up was performed at 3, 6, 12, 24, 36, 48 and 60 months, in each visit IPPS, urinalysis, uroflowmetry and incontinence questionnaire was performed. Complication were classified according to Clavien's score. Statistical analysis was performed by Wilcoxon and ANOVA Friedman test ($p < 0.05$)

Results

We reviewed our records of 162 women with voiding dysfunction with sphincterotomy. We included 116 with complete urodynamic studies at baseline and at six-months follow-up. The average age was 44.8 ± 13.2 years. The baseline International Prostate Symptom Index was severe in 56% and at 12-months follow up assessment was 9.5% ($p < 0.000$). The Blaivas' nomogram was unobstructed in 13.8% and at 6-months follow up assessment was 41.4% ($p < 0.000$). Sixty-one women had urinary incontinence at baseline, 55.7% with stress only and 44.3% with urgency only, at 6 months 72 patients had some kind of incontinence, 68% with stress only and 32% with urgency only ($p = 0.03$), one year after only 65 continued with some kind of incontinence, 64.6% had stress incontinence component (in 3 patients was corrected with surgery incontinence in this period) and 35.4% with urgency component ($p = 0.07$). Finally, 22 patients required an anti-incontinence surgery (median 20 months). Urodynamics changes are showed up in Table 1

Urodynamic values			
	Preoperative Med (Min – Max)	Postoperative Med (Min – Max)	<i>p</i>
Qmax	19.75 (3.4 – 67.5)	31.7 (6.2 – 76.6)	0.000
Qave	8.6 (1.2 – 67.5)	12.8 (2.8 – 45.1)	0.000
P Max	60 (10 – 115)	40 (10 – 100)	0.000
FPL	31.1 (2.7 – 46.7)	25.4 (8 – 69.8)	0.000
MUP	101.6 (24.8 – 51.01)	50.6 (15.3 – 156)	0.000
PVR	70 (0 - 1270)	37.5 (0 – 360)	0.000

Q max: Maximum Flow Rate, Q ave: Average Flow Rate, MDP: Maximum Detrusor Pressure, FPL: Functional Profile Length, MUP: Maximum Urethral Pressure, PVR: Post-Void Residual.

Interpretation of results

To our knowledge this is the first report of this surgical technique in this type of patients. We reduced the total urethral closing area after the sphincterotomy by two thirds (1732 to 651 $\text{cmH}_2\text{O} \cdot \text{mm}$), making an improvement in the the micturition process verified by urodynamics and symptoms score.

Concluding message

The anteromedial sphincterotomy is a useful procedure in patients with impaired bladder emptying, providing symptomatic and urodynamics improvement. Urinary stress incontinence increased however, can be resolved by surgery.

References

1. Moreno-Palacios J, Maldonado-Alcaraz E, Montoya-Martínez G, Serrano-Brambila E. Outcomes and complications of sphincterotomy with bladder neck incision in neurologically healthy male patients with voiding dysfunction. Arch Esp Urol 2012 Mar;65(2):244-50.

Disclosures

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