

IS ENOUGH A STANDARDIZED BASIC OFFICE EVALUATION PRIOR TO SUB URETHRAL SLING SURGERY IN A SELECTED SAMPLE OF WOMEN WITH MIXED URINARY INCONTINENCE?

Hypothesis / aims of study

A standardized basic office evaluation (BOE) is enough prior to sub urethral sling surgery in a selected sample of women with mixed urinary incontinence. This could avoid the needing of a routinely urodynamic evaluation in this group of patients.

Study design, materials and methods

95 women with mixed urinary incontinence with predominant effort component were enrolled in the study. BOE included medical history, bladder diary, physical evaluation with full bladder (250 ml of saline solution), flowmetry, post-void residual volume (PVR) and the questionnaires I-QoL and ICIQ-SF. Patients under 18, positive urine culture, antecedents of radiotherapy or any previous anti-incontinence procedure, urgency predominant component of their incontinence, absence of leakage with effort during the physical examination and / or not referred stress urinary component on questionnaires (ICIQ-SF), were excluded. 80 women met inclusion criteria and were analysed. In all these selected patients an urodynamic test (EUD) was performed according to the ICS standards. All patients underwent adjustable sub-urethral trans-obturator sling (TOA), which provides the option to adjust the tension of the mesh with the patient awake, one to five days after the surgery.

Postoperative assessment included medical history, cough test with full bladder (250 ml saline solution), flowmetry, PVR measurement and I-QoL, ICIQ-SF and PGI-I questionnaires.

Objective cure was defined as negative cough test with bladder full with 250 ml of saline solution. Subjective cure was defined as "never leak" in the frequency item of ICIQ-SF questionnaire.

Results

The clinical and preoperative characteristics of the sample are shown in Table 1.

The EUD did not show any patient with bladder capacity inferior to 200 ml or PVR greater than 50ml, as was seen with BOE. In 25 women (31.2%) the EUD showed detrusor contractions (DO) during filling phase and 24 (30%) had leakages with abdominal pressure less than 60 cm H₂O (IUD). These findings were not associated with worse outcome after surgery treatment.

Postoperative adjustment was needed in 14 (17.5%), due to obstruction in 4 (5%) and 10 (12.5) to incontinence. All patients were discharged continent with a mean maximum flow of 16 ml/s (range 11-25).

After a mean follow-up period of 48 months (12-62) the objective cure rate (negative cough test) was 86.2%, but if we evaluate the cure rate with the ICIQ-SF (never leak urine), the percentage decreases to 57%. An additional 8% refers great improvement after surgery in the same questionnaire (Table 1).

Table 1. Sample characteristics

Sample Characteristics (n=80)		Preoperative	Postoperative
Age ^a			57.2 (9.8)
Body mass index ^b			28.3 (21.4-47.5)
Years of incontinence ^a		6.7 (5.2)	
Previous hysterectomy ^c		19 (23.7)	
Grade of incontinence ^c			
	Moderate	31 (38.7)	
	Severe	49 (61.2)	
Pads / day		3 (1-9)	
Urodynamic test			
	MCC (ml) ^b	360 (210-430)	
	Qmax (ml/s) ^b	26 (10-52)	16 (11-25)
	PVR ^b	0 (0-50)	
	VLPP <60 (cm H ₂ O) ^b	24 (30%)	
	Pdet Qmax (cm H ₂ O) ^b	21.3 (10-60)	
	DOA ^c	25 (31.2)	
ICIQ-SF			
	Frequency ^c		
	Never	0 (0)	46 (57.5)
	Once a week or less	0 (0)	15 (18.7)
	2-3 times a week	2 (2.5)	8 (10)
	Once a day	3 (3.7)	7 (8.7)
	Several times a day	62 (83.7)	4 (5.0)
	All the time	13 (16.2)	0 (0)
	Impact ^b		
	Global Index	9 (4-10)	0 (0-8)
	Items 3+4+5	15 (9-20)	3 (2-15)
I-QoL ^d		31 (0-76)	95 (18-100)
PGI-I ^c			72 (90)
Objective cure rate with BOE ^c			
	No leakage		69 (86.2)
	Improvement		5 (6.2)

Interpretation of results

Low bladder compliance could be associated with worse outcome after anti incontinence surgery in patients with MUI. Although the current literature does not support the decision to cancel the surgery when DO is found at preoperative EUD, controversy exists (1,2). On the other hand, in the majority of women with MUI, the urge component disappears or relieves after sub-urethral adjustable sling procedure (3). No other treatment option offers an outcome comparable to that.

According to our results, the surgical outcomes with TOA adjustable sub urethral sling suggests that our BOE would be a good screening test to determine which patient can be operated directly and which one will need further studies like EUD.

Concluding message

In a selected group of patients with MUI the EUD seems not to be necessary prior to surgery.

References

1. Nager CW, FitzGerald M, Kraus SR et al. Urodynamic measures do not predict stress continence outcomes after surgery for stress urinary incontinence after surgery for stress urinary incontinence in selected women. J Urol 2008; 180(5): 2076-2080
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3. Kulseng-Hanssen S, Husby H, Schiotz HA. Follow-up of TVT operations in 1113 women with mixed urinary incontinence at 7 and 38 months. Int Urogynecol J 2008;19:391-396

Disclosures

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