

Abstract #435

URODYNAMIC STUDIES IN THE PREOPERATIVE EVALUATION OF FEMALE STRESS URINARY INCONTINENCE

González Ginel, I.; García-Rayó Encina, C.; Arrébola Pajares, A.; Medina Polo, J.; Rodríguez Antolín, A.
Urology Department, Hospital Universitario 12 de Octubre

Hypothesis / aims of study

The performance of a urodynamic studies (UDS) in the preoperative assessment of female stress urinary incontinence (SUI) is a controversial topic. European guidelines and NICE guidelines recommend against routinely performing UDS prior to treatment for uncomplicated SUI. However, it is estimated that there is a low percentage of patients with uncomplicated SUI.

This study **aims to**:

- Identify the **proportion of patients with uncomplicated SUI undergoing transobturator tape surgery** at our center.
- Analyze the **results of preoperative UDS** in the patients who underwent it.

Study design, materials and methods

Retrospective observational study

128 patients who underwent TOT surgery for SUI at our institution between 2018 and 2023. Exclusion criteria:

- In cases were UDS was performed following the International Continence Society's Good Urodynamic Practice Guidelines.
- Neurological disorders
 - Previous oncological pelvic surgery
 - History of pelvic radiotherapy

Results and interpretation

PATIENT CHARACTERISTICS

	N=128	%
Age, Mean (SD)	58 (12.9)	
HTA	39	30.5
DM	16	12.5
BMI, Mean (SD)	30.2 (7.3)	
Postmenopausal	87	68
Previous Botox	7	5.5
Pelvic Surgery	11	8.6
Lap .Colposacropexy	5	
Vaginal Mesh	5	
Lap. Rectopexy	1	
Hysterectomy	21	16.4
Uncomplicated SUI	41	32
OAB syndrome	86	67.2
UUI	63	49.2
Post-voiding symp.	5	3.9
Urethral Hypermob.	73	57
SUI on examination	86	67.2
Prolapse	56	43.8
Cystocele	40	
Rectocele	5	
Both	11	
Preoperative UDS	94	73.4

UDS FINDINGS

	N=94	%
Bladder Volume, Mean (SD)	338 (124)	
SUI on UDS	70	74.5
Volume of SUI, Mean (SD)	162 (111)	
Incompetent urethral closure	9	9.6
Detrusor Overactivity	30	31.9
Hypersensitivity	3	3.2
Detrusor Underactivity	4	4.2
Significant PVR (>100mL)	1	1.1
Uncomplicated SUI on UDS	46	48.9

Discordances

- 24 (25.5%): no SUI during UDS.
- 22 (23.4%): stress leakage during examination but not during UDS.
- 12 (12.8%): stress leakage during UDS but not during examination.

While our data on uncomplicated SUI are higher than those described in other series, being a retrospective series of patients selected for surgery may introduce a bias that could explain these differences.

These results suggest that uncomplicated SUI is not the most predominant type, meaning that only a less significant percentage of patients might avoid undergoing UDS before considering surgery for SUI.

When analyzing urodynamic results, we observed that 31.9% of cases had detrusor overactivity. Some studies have suggested that this finding may be a risk factor for worse outcomes after surgery, which should be considered in managing patient expectations.

Only 4 patients showed parameters of detrusor underactivity, and 1 had a significant post-void residual; therefore, surgery might have been discouraged for patients presenting these findings.

Conclusions

The 49% of patients with uncomplicated SUI in our series could avoid UDS before undergoing surgery. Furthermore, it is important to consider that clinical symptoms of complicated SUI should be routinely evaluated along with adequate medical history and physical examination. All of this is necessary before performing UDS. Once performed, UDS findings can influence treatment choice.

References

- European Association of Urology. EAU Guidelines on Non-Neurogenic Female LUTS [Internet]. Available from: <https://uroweb.org/guidelines/non-neurogenic-female-luts>
- Serati M, Braga A, Torella M, Soligo M, Finazzi-Agro E. The role of urodynamics in the management of female stress urinary incontinence. Neurourol Urodyn. 2019;38(S4):S42-S50. doi:10.1002/nau.23865
- National Institute for Health and Care Excellence (NICE). Urinary incontinence and pelvic organ prolapse in women: management [Internet]. London: National Institute for Health and Care Excellence (NICE); 2019 Sep [cited 2024 Apr 2]. Available from: <https://www.nice.org.uk/guidance/ng123>