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# DETRUSOR OVERACTIVITY IS A PREDICTOR OF POORER PRE AND POSTOPERATIVE QUALITY OF LIFE IN WOMEN WITH MIXED URINARY INCONTINENCE IN COMPARISON TO WOMEN WITH NO DETRUSOR OVERACTIVITY

#### Hypothesis / aims of study

A group of women with mixed urinary incontinence (MUI) are found to have detrusor overactivity (DOA) in urodynamic studies whereas another group of women show normal detrusor activity. The aim of this study is to investigate whether DOA is associated with a poorer quality of life (QoL) in women with MUI and whether it affects QoL outcomes after midurethral sling(MUS) surgery.

### Study design, materials and methods

We retrospectively reviewed the charts of female patients who admitted to our outpatient clinic with MUI. All patients were assessed with physical examination, urinalysis, urine culture, QoL assessment with 15 questioned SEAPI questionnaire, bladder diary for 3 days and urodynamic evaluation. Patients with and without DOA were compared in terms of factors that can effect quality of life. DOA was defined as any 5 cm H20 symptomatic involuntary rise in detrusor pressure during cystometry.

### Results

A total of 104 patients were included, mean age was 55,3(min: 31 max: 79). Sixty nine patients had DOA and 35 patients did not have DOA on urodynamic assessment. The mean SEAPI scores of patients with and without DOA were  $30,7(\pm10,0)$  and  $23,0(\pm9,2)$ , respectively(p:0,003, T test), at the time of initial assessment. Fifty two of these women underwent MUS surgery consecutively. The preoperative SEAPI scores of these women with and without DOA were not significantly different;  $25,4(\pm9,5)$  and  $23,0(\pm8,8)$ , respectively(p: 0,3). The mean postoperative SEAPI scores of women with DOA were significantly higher compared to those without DOA;  $8,7(\pm8,3)$  and  $4,5(\pm5,5)$ , respectively(p: 0,03). The patients with and without DOA were not significantly different in terms of age, coexistence of stress urinary incontinence, menopausal status, existing comorbidities like DM and HT, pelvic organ prolapsus and incontinence episodes.

#### Interpretation of results

Independent from other factors, DOA is associated with worse SEAPI scores in women with MUI. DOA is also associated with less improvement in SEAPI scores in the postoperative period in patients who undergo MUS surgery for MUI, compared to those without DOA.

## Concluding message

Detrusor overactivity as revealed by cystometry is an independent predictor of poor quality of life in women with MUI and it is associated with less improvement in QoL after MUS surgery.

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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	this is a retrospective chart review study
Was the Declaration of Helsinki followed?	Yes
Was informed consent obtained from the patients?	No