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# URODYNAMIC CHARACTERISTICS OF POSTMENOPAUSAL WOMEN SUFFERING TYPE 2 DIABETES MELLITUS

## Hypothesis / aims of study

The aim of the study was an evaluation of diabetic cystopathy in female patients of postmenopausal age with type 2 diabetes during urodynamic observations.

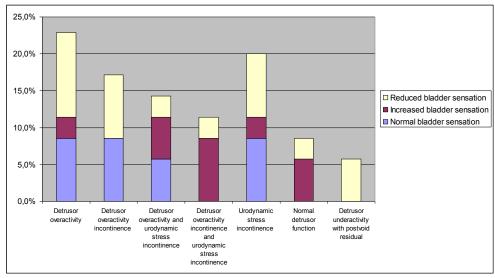
### Study design, materials and methods

During this study thirty two female patients were in focus. All of them were in menopause and they were suffering diabetes mellitus type 2. Mean age was 63.7 years; duration of diabetes was 157.5 months. The patients with urinary tract infection have been excluded from the study. The patients were underwent conventional urodynamic studies, which included filling cystometry, pressure flow study and uroflowmetry with estimation of postvoid residual urine volume.

#### Results

More than half of patients (54,3%) showed detrusor overactivity. Detrusor overactivity incontinence and urodynamic stress incontinence was found in 11,4% cases. Seven patients suffered pure urodinamic stress incontinence (20% cases). A summary result of the study is presented in the table 1 and histogram 1.

	Normal sensation	bladder Increased sensation	bladder Reduced sensation	bladder
Detrusor overactivity	3 (8,6%)	1 (2,9%)	4 (11,4%)	
Detrusor overactivity incontinence	3 (8,6%)		3 (8,6%)	
Detrusor overactivity and urodynamic stress incontinence	2 (5,7%)	2 (5,7%)	1 (2,9%)	
Detrusor overactivity incontinence and urodynamic stress incontinence	S	3 (8,6%)	1 (2,9%)	
Urodynamic stress incontinence	3 (8,6%)	1 (2,9%)	3 (8,6%)	
Normal detrusor function		2 (5,7%)	1 (2,9%)	
Detrusor underactivity with postvoid residual			2 (5,7%)	
Table 1.				



Histogram 1.

## Interpretation of results

Dysfunctions of urination have long been known as a problem associated with diabetes. In this sample of postmenopausal women detrusor overactivity is the most common finding of urodynamic observation (54,3%). Impaired bladder sensation, including 42,9% of reduced sensation and 25,7%, resulted in 68,6%. We believe that both afferent and efferent neuro pathways are involved in cystopathies developed due to diabetes.

#### Concluding message

Women with diabetes are more likely to experience bladder sensation problems in association with detrusor overactivity. Postvoid residual bladder volume plays no demonstrable role. In postmenopausal women suffering type 2 diabetes.

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	Moscow State University Ethics Commitee
Was the Declaration of Helsinki followed?	Yes
Was informed consent obtained from the patients?	Yes