

THE EFFECT OF PATIENTS' POSITION ON THE SELECTED URODYNAMIC RESULTS

Hypothesis / aims of study

Urodynamic investigation (UD) seems to be the most objective examining tool used in the diagnosis of urinary incontinence.

Although, according to ICS recommendations, the UD may be omitted during the initial phase of diagnosis and treatment, there are obvious indications to perform this procedure. The UD is usually carried out in supine position (lying or lithotomy position), thus giving the possibility of different kinds of bias.

The aim of the study was to evaluate the influence of the patients' position during the investigation on the selected urodynamic results.

Study design, materials and methods

The studied group consisted of 40 menopausal women suffering from urinary urge incontinence. The weak recovery was the indication to performing UD. The filling cystometry (50ml/min) was carried out in three positions. 16 women were investigated in the lithotomy position, 14 – in the sitting position, and 10 women in the standing position. The BMI of the patients did not differ significantly between the groups. The values of the first sensation (FS), the strong sensation (SS) and the maximal bladder volume (MBV) were measured. Kruskal-Wallis' ANOVA test was used for the statistical analysis.

Results

Median values and ranges of the selected urodynamic parameters measured in three positions are presented in the table.

	Lithotomy	Sitting	Standing	Kruskal-Wallis test
FS	112.5 (46.0-249.0)	70.5 (43.0-195.0)	53.5 (26.0-80.0)	H=7.44, p=0.024*
SS	293.0 (150.0-430.0)	147.5 ((76.0-270.0)	160.0 (100.0-205.0)	H=12.1, p=0.002*
MBV	390.0 (290.0-430.0)	304.0 (165.0-398.0)	330.0 (290.0-380.0)	H=5.10, p=0.078

* statistically significant

Interpretation of results

In patients investigated in the erect position the first and strong sensations were noted significantly earlier. The position of the patient did not affect the measurements of maximal bladder volume.

Concluding message

The erect position (sitting or standing) of the patient during the urodynamic investigation amplified the first and strong sensations, thus giving the evidence of better mirroring of patients' symptoms.

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Is this a clinical trial?	Yes
Is this study registered in a public clinical trials registry?	Yes
Specify Name of Public Registry, Registration Number	Medical University in Lublin registry
What were the subjects in the study?	HUMAN
Was this study approved by an ethics committee?	Yes
Specify Name of Ethics Committee	Medical University in Lublin's Ethics Committee
Was the Declaration of Helsinki followed?	Yes
Was informed consent obtained from the patients?	Yes