

IS CLINICAL DIAGNOSIS RELIABLE IN ASSESSMENT OF LUTS COMPARING TO THE URODYNAMIC STUDIES?

Hypothesis / aims of study

The purpose of this study was to evaluate the accuracy of clinical diagnosis compared to urodynamic findings in patients presenting with LUTS.

Study design, materials and methods

Over a one year period, all patients undergoing urodynamic studies (UDS) had their initial clinical diagnosis recorded from clinical data sheets and these results was compared to the diagnosis reached via urodynamic studies. All patients were categorized according to history taking, urinary diary, questionnaires and physical examinations; using the standardized terminology of the International Continence Society. Evidence of leakage during valsalva in the absence of a detrusor contraction was recorded as urodynamic evidence of SUI (USI). Any urinary leakage before the command to void that that was associated with detrusor over activity (DO) was recorded as urge urinary incontinence detected by urodynamics. We correlated each urodynamic findings with the associated clinical findings.

Results

Total 109 women with LUTS were investigated. Mean age of these 109 women was 54 (min 35- max 77), and mean parity was 3.10 (min 0- max 11). According to clinical investigation and to urodynamic studies patients were categorised into 5 groups, separately; 1) normal 2) Over Active Bladder (OAB) 3) Mixed Urinary Incontinence (MUI) 4) Stress Urinary Incontinence (SUI) 5) Urge Urinary Incontinence (UUI).

Interpretation of results

There is a 72.7% chance of identifying SUI on UD in women suggested SUI based on clinical finding. In the suspected MUI group, 40.3% had diagnoses confirmed on UDS. In UUI group, 44.4% were found to have SUI and 22.2% had normal UD findings.

Table 1: Relationship between clinically diagnosed groups and their urodynamic findings.

Clinic Finding	Urodynamic Finding			
	Normal	DO	MUI	SUI
Normal (n:1)	1 %100	0	0	0
OAB (n:4)	0	4 (%100)	0	0
MUI (n:62)	8 (12.9%)	10 (16.1%)	25 (40.3%)	19 (30.6%)
SUI (n: 33)	5 (15.2%)	0	4 (12.1%)	24 (72.7%)
UUI (n:9)	2 (22.2%)	2 (22.2%)	1 (11.1%)	4 (44.4%)

The best diagnostic accuracy is 72.7% with diagnosis of SUI. Diagnostic accuracy is poorest for UUI with only 22.2% having the same diagnosis following UDS. We found poor correlation between clinical diagnosis with urodynamic findings ($p < 0.001$, Kappa: 0.298).

Concluding message

Accuracy of diagnosis based on history and clinic examination compared with urodynamic study outcome was poor. We thought that clinical diagnosis alone is not sufficient to decide for surgical repair in women suspected SUI.

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?	No
This study did not require ethics committee approval because	It was a retrospective chart-review. this study may not impact on the subjects.
Was the Declaration of Helsinki followed?	Yes
Was informed consent obtained from the patients?	No