

IS MULTICHANNEL CYSTOMETRY AN ESSENTIAL DIAGNOSTIC TOOL IN THE ASSESSMENT OF LOWER URINARY TRACT SYMPTOMS?Hypothesis / aims of study

The purpose of this study was to evaluate the accuracy of clinical diagnosis compared to that reached via standard urodynamic studies, (UDS) in patients presenting with lower urinary tract symptoms.

Study design, materials and methods

All patients undergoing UDS over a 6 month period had their initial clinical diagnosis recorded and this was compared to the diagnosis reached as a consequence of their UDS.

UDS were performed by a single individual and in accordance with ICS best practice recommendations.

Demographic data was also recorded and rates of clinical accuracy, assuming the correct diagnosis was reached via UDS, were calculated for all pre-procedure diagnoses.

Results

78 patients underwent UDS during the data collection period, with 36 (46%), being male and 42 (54%) female. The average age of patients was 54.

Diagnostic accuracy rates compared to post UDS diagnosis are represented in the table below

Clinical Diagnosis	UDS Diagnosis								
	BOO	DO(w)	DO(d)	USI	MUI	SU	N	A	
BOO	56%	17%	16%	0%	0%	0%	17%	11%	
OAB (w)	0%	41%	12%	6%	6%	0%	35%	0%	
OAB (d)	15%	8%	8%	8%	0%	23%	23%	15%	
SI	0%	0%	20%	50%	20%	0%	10%	10%	
MUI	0%	9%	19%	38%	14%	5%	19%	0%	

BOO : Bladder outflow obstruction

OAB (w) : Overactive bladder wet

OAB (d) : Overactive bladder dry

SI : Stress incontinence

MUI : Mixed urinary incontinence

USI : Urodynamic stress incontinence

SU : Sensory urgency

N : Normal study

A : Atonic detrusor

DO : Detrusor overactivity

Table showing pre-UDS diagnostic accuracy compared with post UDS diagnosis.

Interpretation of results

At best diagnostic accuracy is marginally over 50% with pre procedure diagnoses of BOO and SI being the most accurate at 56% and 50% respectively.

Diagnostic accuracy is poorest for OAB (dry) with only 8% having the same diagnosis following UDS.

Concluding message

Pre and post urodynamic diagnosis in patients presenting with lower urinary tract symptoms is poor which especially raises concerns regarding progress to invasive therapy on the basis of symptoms alone.

The UK NICE guidelines (2006) recommend surgical treatment for "pure" stress incontinence on the basis of symptoms alone provided there are no complicating issues such as urgency. This study, however illustrates that only 50% of such patients have isolated USI with a further 40% experiencing DO either in isolation or in combination with USI as defined by the ICS.

We recommend that all patients progressing to invasive therapy should undergo UDS.

Specify source of funding or grant	N/A
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	No alteration in clinical practice
Was the Declaration of Helsinki followed?	No
This study did not follow the Declaration of Helsinki in the sense that	Not applicable

Was informed consent obtained from the patients?

No
