

**HOW WELL INFORMED ARE WOMEN WHO UNDERGO URODYNAMIC TESTING? AN EXPLORATORY STUDY**Hypothesis / aims of study

Urodynamic studies (UDS) are complex, invasive, and can be accompanied by emotional and physical distress in patients (1). Insufficient preparation for the test can create additional distress (2). Prior to the test, women who undergo UDS are often given an information sheet explaining the procedure. The RN or technician performing the test often offers additional information. Our study was designed to evaluate how adequately informed women are prior to undergoing urodynamic testing, in order that we could facilitate patient-focused care and informed decision making.

Study design, materials and methods

Our study was a descriptive, exploratory study involving a convenience sample of 200 women attending an outpatient clinic. Data were collected from consenting women a) immediately prior to the UD test and b) within three days of completing the test. Demographic data were collected. The level of anxiety, embarrassment, and pain women experience associated with the test was quantitatively measured using Likert-style numeric rating scales and the State-Trait Anxiety Inventory (SF-STAI). Qualitative information was collected using open-ended questions that asked about reasons for any anxiety, embarrassment and discomfort. We had no prior research upon which to base sample size calculations; however, given the descriptive and exploratory nature of this study, we believe n = 200 should ensure a representative array of perceptions related to the information received and the emotional and physical impact of UD testing.

Results

Data was compiled from the 151 pre and post-test questionnaires which were returned after UD testing. The mean age of respondents was 55 years, with a range of 28-88. English was the first language for 139 (92.1%) and 127 (84.1%) had education ranging from high school to University graduate. Half of the women were visiting the clinic for the first time (n=75 (49.7%), n =); 72 (47.7%) had been catheterized before. Summary questionnaire results are shown in the table on following page.

Primary outcome results of how adequately informed women felt before the UD test showed that 140 respondents (92.7%) had read the information sheet describing the test. 118 (78.1%) felt that they adequately understood the reasons for the test

The secondary outcome, distress associated with UD testing showed that 113 (74.9%) rated their anxiety level as slight or moderate and 7 (4.6%) as severe. After the test, 126 (84.5%) felt they understood why they had the test and 104 (69.8%) felt they had been given enough information. 103 (71.8%) indicated they were slightly or moderately anxious during the test and while 39 women (26.2%) experienced no anxiety. Results from the SF-STAI anxiety score indicated that approximately half of all women were somewhat or moderately anxious. Slight to severe embarrassment was experienced by 85 (57.0%), and 63 (42.3%) had none at all. Most women (n =120, 80.5%) felt discomfort during the test, while 27 (18.1%) felt none. 134 (90.0%) felt the information sheet was useful. Only 14 (9.4%) of women found the test worse than they expected, and only 2 (1.3%) would definitely not undergo the test again.

Interpretation of results

Women undergoing UDS were adequately prepared for the procedure and found the information sheet helpful in the majority of cases. While there was anxiety, embarrassment and discomfort associated with the test, most women would undergo the procedure again and felt it was the same or better than expected. Open-ended questions indicate that the role of the RN or technician assisting with the test is very significant in reducing anxiety and making the test bearable.

Concluding message

It is very important to continually focus on the preparedness of women anticipating UDS. Adequate preparation includes reading information material as well as receiving information from the person carrying out the test. Their role in explaining the procedure, keeping the patient relaxed and comfortable are imperative to the patient's response to the test in perceived anxiety, pain and embarrassment. Although awareness of reasons for the test and preparation for the procedure by reading the available handout is very helpful, the manner of the person performing the test appears to have the largest impact on the outcome.

1. Benness C., Manning J. Patient evaluation of urodynamic investigations. *NeuroUrol Urodynam* 1997; **16**: 509-510.
2. Gorton E, Stanton S. Women's attitudes to urodynamics: A questionnaire survey. *B J Obstet Gynaecol* 1999; **106**: 851-856.

		Pre-test responses n=151	Post-test responses n=151
<b>Received information sheet</b>	Yes	135 (89.6%)	
<b>Read information sheet</b>	Yes	140 (92.7%)	
<b>Anxiety about test</b>	None	29 (19.2%)	
	Slight	62 (41.1%)	
	Moderate	51 (33.8%)	
	Severe	7 (4.6%)	
<b>Anxious about</b>	Pain	31 (20.5%)	
	Unknown	29 (19.2%)	
	Catheter	25 (16.6%)	
	Test	21 (13.9%)	
	Test results	17 (11.3%)	
<b>Understand Reason for Testing</b>	Yes	118 (78.1%)	126 (84.5%)

<b>Understand What Test will Involve</b>	Yes	103 (70.2%)	105 (70.5%)
<b>Given Enough Information</b>	Yes	98 (64.9%)	104 (69.8%)
<b>Usefulness of Info Sheet</b>	Useful		134 (90.0%)
<b>SF-STAI Anxiety score</b> (24 most anxious)		13.0 (IQR 10-15) Range 6-24	11.0 (IQR 9-14) Range 6-24
<b>Anxious during test</b>	Not at all		39 (26.2%)
	Slightly		77 (51.7%)
	Moderate/Severe		33 (22.1%)
<b>Embarrassed during test</b>	Not at all		63 (42.3%)
	Slightly		62 (41.6%)
	Moderate/Severe		23 (15.4%)
<b>Discomfort during test</b>	Not at all		27 (18.1%)
	Slightly		86 (57.7%)
	Moderate/Severe		34 (22.8%)
<b>Undergo Test again</b>	Definitely Not		2 (1.3%)
	Only if Necessary		67 (45%)
	Not Sure/Perhaps		16 (10.8%)
	Certainly		60 (40.3%)

**Table:  
Summary  
Questionnaire  
Results**

**References**

1. Bennes C., Manning J. Patient evaluation of urodynamic investigations. *Neurourol Urodynam* 1997; 16: 509-510
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n E, Stanton S. Women's attitudes to urodynamics: A questionnaire survey. *B J Obstet Gynaecol* 1999; 106: 851-856

<b>Specify source of funding or grant</b>	<b>Urology Nurses of Canada</b>
<b>Is this a clinical trial?</b>	<b>No</b>
<b>What were the subjects in the study?</b>	<b>HUMAN</b>
<b>Was this study approved by an ethics committee?</b>	<b>No</b>
<b>This study did not require ethics committee approval because</b>	<b>There is no intervention associated with this study; urodynamic testing is as per standard care and women would undergo the testing whether or not they are in the study.</b>
<b>Was the Declaration of Helsinki followed?</b>	<b>Yes</b>
<b>Was informed consent obtained from the patients?</b>	<b>Yes</b>