

ANXIETY IN UROLOGY CLINICS

Hypothesis / aims of study

Little is known about the level of anxiety in both men and women before urological outpatient procedures. Preliminary studies have suggested higher levels of anxiety before urodynamic procedures in women (1). This finding however has not been reproducible (2). The aim of this study was to assess the level of anxiety in both men and women attending urology specialist clinics at a single institution.

Study design, materials and methods

A prospective study was undertaken to measure the level of anxiety before outpatient procedures. A validated self completed questionnaire; the Spielberger State and Trait Anxiety Inventory (STAI) was the psychometric method used to assess the level of anxiety in this study. The STAI was used to compare the level of anxiety before a procedure (State) against the general anxiety level (Trait) of a patient. The questionnaire consisted of 40 questions and took approximately 10 minutes to complete. Male patients received the questionnaire before outpatient TRUSP (transrectal ultrasound guided prostate biopsy), invasive urodynamics (uds) or uroflowmetry clinics (FC). Female patients were given the same questionnaire prior to invasive urodynamics.

Paired sample t-test was used to compare the state and trait levels of anxiety within each group of patients undergoing these outpatient procedures. The between group state and trait levels of anxiety in men and women undergoing invasive urodynamics was analysed using the ANOVA. SPSS V12 software package was used to perform the statistical analysis.

Results

A total of 120 patients received the STAI and completed this study.

Urological procedure	UDS-men	TRUSP	FC-men	UDS-women
Total Number of patients	30	30	30	30
Median Age	49 (21-82)	68 (50-73)	67 (34-85)	48(22-78)
Mean State score (SD)	41.4 (9.6)	36.7(10.1)	32.6(10.5)	44.5(12.2)
Mean Trait Score (SD)	38.9 (8.7)	32.2(8.8)	34.9(10.9)	40.8(11.7)

	Paired t-test
State UDS-men vs Trait UDS-men	0.12
State TRUSP vs Trait TRUSP	0.003
State FC-men vs Trait FC-men	0.44
State UDS-women vs Trait UDS-women	0.05

Interpretation of results

The results showed that the male patients undergoing transrectal ultrasound guided biopsy of prostate have highly significant levels of anxiety before the procedure. This appears not to be the case in male patients attending the urodynamics or uroflowmetry clinics. This result can be rationalised by the fact that prostate biopsies involve the probability of prostate cancer

diagnosis. A similar conclusion had been drawn from a previous study where the diagnosis of cancer was a probability (3).

The state levels of anxiety were greater in women than men who underwent urodynamics. This was demonstrated by the ANOVA ($F = 4.9$ and $p = 0.028$). The trait anxiety levels between the men and women undergoing the urodynamics however were not statistically significant on the ANOVA ($F = 1.7$ and $p = 0.23$). This suggests that the thought of undergoing invasive urodynamics was inducing higher levels of anxiety in women than in men.

Concluding message

There is an objective evidence of greater levels of anxiety in male patients undergoing TRUSP than invasive urodynamics or uroflowmetry. Women demonstrated greater levels of anxiety than men before similar invasive urodynamics.

This information is useful in tailoring better counselling and advice provision to patients both before and during the proposed outpatient investigations. Similar anxiety assessments carried out at regular intervals could also objectively monitor the outcomes from the changes to the counselling techniques put in place.

1. BJOG 1999;106: 851-6
2. Neurourol Urodyn 2004;23: 527
3. Br J Obstet Gynae 2001; 108:482-4