

IS THE 24 HOUR PAD TEST AN ACCURATE ASSESSMENT TOOL FOR SUCCESS OF CONTINENCE SURGERY?

Hypothesis / aims of study

To find the value of 24 hour pad test in assessing patient symptoms after continence surgery.

Study design, materials and methods

All female patients who complained of stress urinary incontinence (SUI) were assessed with King's Health Questionnaire (KHQ) and urodynamic tests. These women underwent transobturator tape surgery between 2006 and 2013. They were assessed more than 18 months postoperatively with the KHQ and a 24 hour pad test. A detailed instruction sheet about the pad test was posted to them along with 3 standard pads and a sealable plastic bag for used pads. This is a validated method of carrying out this pad test. The women returned the completed questionnaires and the sealed bag with used pads. The pads were weighed and amount of urinary leakage was calculated. Statistical analysis was performed to determine whether women felt their bladder was still a problem and the symptom score determined with the KHQ and amount of urinary leakage on the pad test. SPSS software version 21 by IBM was used for analysis.

Results

Fifty five women returned the KHQ and the pad test after surgery. Using the KHQ, 37 out of 55 women reported little or no SUI with the symptom assessment question. Eleven patients reported moderate and seven patients reported severe SUI. The 24 hour pad test showed that 39 women were continent with less than 4 g urine loss. Mild (4 to 20 g), moderate (21 to 74 g) and severe (75 g or more) incontinence was seen in 10, 5 and 1 women respectively. 18% of women had moderate to severe bother from their bladder on the KHQ had a negative pad test loss (< 4 g) and 16% of women who reported significant SUI had negative pad test loss. Surprisingly 9% (5) women with a pad test loss greater than 4 g had no bother from their bladder. The results of the study were as shown in table 1, 2 and 3.

Table 1: Objective cure on 24 hour pad test compared with 'bladder specific quality of life score' from King's Health Questionnaire (KHQ)

Bladder bother	Pad test negative	Pad test positive	P value
No	29	5	0.002
Yes	10	11	

Table 2: Stress urinary incontinence (SUI) symptom (subjective) compared with the 'bladder specific quality of life score' both from the King's Health Questionnaire (KHQ)

Bladder bother	No SUI	SUI	P value
No	28	6	0.002
Yes	9	12	

Table 3: Stress urinary incontinence (SUI) symptom score compared with pad test loss

SUI	Pad test negative	Pad test positive	P value
No	30	7	0.026
Yes	9	9	

There was significant association between the patients' score for SUI in KHQ and the amount of urinary leakage by the pad test ($P < 0.05$) (Table 2).

The bladder specific QOL (Question 2) was significantly associated with amount of urinary leakage by the pad test ($P < 0.05$) (table 1).

Interpretation of results

The Working Group of the International Continence society (ICS) Urodynamic Committee reported that the pad test is underutilised; it recommends use of a one hour or 24 hour pad test to assess urinary incontinence (1). Our study showed that the objective assessment of incontinence using 24 hour pad test after continence surgery reflects the bladder specific quality of life experienced by the patient. Pad test alone cannot be used to assess the outcome of continence surgery. QOL questionnaire is essential to assess symptoms in these patients and may be a better assessment of the overall outcome of continence surgery as women have many bladder symptoms, not just stress urinary incontinence, causing them bother and quality of life impairment.

Concluding message

Results of the continence surgery should be assessed using 24 hour pad test with a validated health questionnaire.

References

1. Neurourol Urodyn. 2014 Jun;33(5):507-10.

Disclosures

Funding: None **Clinical Trial:** No **Subjects:** HUMAN **Ethics not Req'd:** It was part of the routine clinical assessment after surgery. **Helsinki:** Yes **Informed Consent:** No