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COMPARISON OF THE ICI-Q SF QUESTIONNAIRE AND THE 24 HOUR PAD TEST WITH OTHER MEASURES FOR EVALUATING THE SEVERITY OF STRESS URINARY LOSS – A PILOT STUDY.

Aims of Study

Evaluation of the severity of urinary loss may be performed using a variety of subjective and objective techniques. Of these the twenty-hour pad test has been demonstrated to be an objective, reliable and reproducible tool (1). The ICI-Q SF is a new measure for evaluating the severity of urinary loss the content validity for which has already been established (2). In addition this questionnaire also evaluates the impact of incontinence on quality of life (QOL). For precision in clinical research, new methods for evaluating the severity of urinary loss require correlation against established techniques. The aim of this study was therefore to compare the severity of urinary loss assessed using the ICI-Q SF to both the twenty-four hour pad test and other measures.

Methods

Twenty-two women presenting to a tertiary urogynaecology unit with a history of primary or recurrent stress urinary incontinence (SUI) were recruited. In each case subtracted twin channel cystometry had been undertaken using a fixed protocol with provocative manoeuvres during filling and capacity and a diagnosis of genuine stress incontinence had been made according to ICS guidelines (3). On examination the presence or absence of urinary loss was assessed by a 'cough test' in the supine position. Further assessment of the frequency and volume of urinary loss was made using the ICI-Q SF (score range 0-21) questionnaire, a three-day frequency volume diary and twenty-four hour pad test (1,2,3). These data were then transferred to a computerised database and Pearson correlation analysis performed to assess the relationship between these measures of incontinence severity.

Results

The mean age was 56 years (R 30-78), mean parity 2 (R 0-5) and mean duration of symptoms 9 years (R1-33). Twelve (40%) women had undergone previous continence surgery. Only 7(32%) women had a positive cough test on clinical examination. The mean number of incontinent episodes per day assessed by urinary diary was 3 (R 1-10), mean urinary loss determined on 24 hour pad test 72 grams (R 4.2 - 463) and mean score for the ICI-Q SF 13 (R 6 - 21). There was a strong correlation between ICI-Q SF and the 24 hour pad test (p=0.02) and also the ICI-Q SF and urinary loss assessed by the 3 day diary (p=0.02). In contrast there was no correlation between the 24 hour pad test and the 3 day urinary diary (p=0.3).

Conclusions

These results demonstrate a good correlation between the 24 hour pad test and ICI-Q SF. A potential advantage of the ICI-Q SF over the 24 hour pad test is that it also includes a QOL assessment. We are currently undertaking a prospective observational study involving a larger cohort of women to verify these findings and compare these techniques to urodynamic measures of urethral resistance and compliance.

References

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24