

URINARY INCONTINENCE DIAGNOSES AND THEIR IMPACT ON QUALITY OF LIFE SYMPTOM SCORES IN WOMEN.

Hypothesis / aims of study:

To compare UDI6 and IIQ7 scores of incontinent women with different urodynamic diagnoses.

Study design, materials and methods:

A retrospective analysis of incontinent women presenting for urodynamic evaluation between 2000 and 2006 was performed. Included patients were incontinent of urine, completed UDI6 and IIQ7 questionnaires, and underwent multichannel urodynamic testing. Data was gathered on presenting complaints, age, BMI, vaginal parity, surgical history, POP-Q exam, UDI 6 and IIQ7 scores, and urodynamic diagnoses. Terminology and POP-Q definitions reflected ICS standards unless specified otherwise. Patients with urodynamic stress incontinence (USI) were sub-grouped into those without overactive bladder OAB (SI) and those with OAB (SO). For the power analysis we estimated average UDI and IIQ scores to be 50 and anticipated an 80% power to detect a 0.05 significance level. These would correspond to standard deviations which are 10% and 15% of the overall average for the UDI and IIQ values, respectively. Forty patients were needed in each diagnostic group to meet these criteria for the UDI analysis and 45 in each group for the IIQ analysis,

Results:

One thousand and twenty eight charts (1028) were reviewed and 613 patients were included in the analysis. The patient population was racially diverse and had a mean age, vaginal parity and BMI of 58 years, 2.7 and 29.7 respectively. Prolapse to or beyond the hymen was present in 272 (45%) patients. The frequency of urodynamic diagnoses were as follows: USI [n=296 (48%), (SI n=56, 9% and SO n=240, 39%)]; mixed urinary incontinence (MUI) [n=124 (20%)]; detrusor overactivity (DO) [n=83 (14%)]; occult USI [n=5 (1%)]; and negative study [n=105 (17%)]. Mean UDI6 and IIQ7 scores were significantly higher in the MUI (UDI 63, IIQ 55), SO (UDI 57, IIQ 48), DO (UDI 58, IIQ 54), and negative study (UDI 57, IIQ 45) groups compared to the SI (UDI 36, IIQ 27) group. Patients with MUI had slightly higher UDI ($p=0.07$) and IIQ ($p=0.06$) scores than those with DO and SO. All patients with DO had OAB symptoms.

Interpretation of results:

Urodynamic diagnosis was the strongest independent predictor of both UDI and IIQ composite scores. BMI was a weak predictor of both UDI6 and IIQ7 scores. Prior incontinence surgery and vaginal parity of one or more were only predictors of UDI6 score. Age, prolapse to the hymen, hysterectomy, and prior prolapse surgery were not associated with UDI or IIQ scores. The high UDI6 and IIQ7 scores in the negative study group was due to the high proportion of patients with OAB and mixed incontinence symptoms (84%) and pain (7.4%) that comprised this group.

Concluding message:

Patients with DO, MUI, and urodynamic stress incontinence with OAB symptoms reported significantly higher bother and impact on quality of life than patients with stress incontinence without OAB symptoms. Patients suffering from OAB or mixed incontinence symptoms also had high UDI6 and IIQ7 scores despite negative urodynamic studies.

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HUMAN SUBJECTS: This study was approved by the Kaiser Permanente Institutional Review Board and followed the Declaration of Helsinki Informed consent was not obtained from the patients.