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DOES THE USE OF INCONTINENCE PROTECTION AFFECT WOMEN'S SEXUAL FUNCTION AND SELF-IMAGE? PRELIMINARY RESULTS OF A PROSPECTIVE OBSERVATIONAL CONTROLLED STUDY IN PERI- OR POST-MENOPAUSAL WOMEN WITH PREDOMINANTLY URGENCY INCONTINENCE..

Hypothesis / aims of study

A growing volume of evidence supports the relationship between lower urinary tract dysfunction (LUTD) and female sexual dysfunction (FSD). FSD appears to be a highly prevalent condition among women with LUTS and urinary incontinence (UI). A clinical diagnosis of overactive bladder (OAB) was found to be associated with reduced sexual function, while women with UI and detrusor overactivity upon urodynamic investigation had the greatest degree of sexual dysfunction.

Data, however, concerning the impact of OAB treatment on sexual function is sparse: in sexually active women with urgency UI (UUI), tolterodine ER improved OAB symptoms as well as scores of sexual health and anxiety measures during a 3-month treatment.

Further, the impact of the use of pads and diapers on patients' self-image and sexual function has not been studied to-date. In a number of medical conditions, greater sexual problems were found to be associated with more body image issues. Correlations between self-image and sexual dysfunction in women with LUT disorders have been published in neurologically impaired women with an indwelling catheter, and women with pelvic organ prolapse. There is currently no available literature on the impact of UUI or mixed UI on patients' self-image and its further association with sexual function.

We aimed to investigate the impact of the use of pads/diapers on sexual function and quality of sexual life of women with UUI or mixed UI following their response to antimuscarinic therapy. We also aimed to investigate the impact of the use of protection for UI on subjective perception of health, quality of life and patient's self-image.

Study design, materials and methods

In a prospective observational treatment outcome study, peri- or post-menopausal, sexually active women with a clinical diagnosis of UUI or mixed UI and using pads or diapers were recruited from a Female Urology outpatients clinic (treatment group). A random sample of age-matched sexually active continent controls without OAB symptoms comprised the control group. Following written informed consent, women in the treatment group were asked to complete a 3-day bladder diary recording the episodes and severity of incontinence and the number of pads/diapers used, the number of micturition episodes and the number of micturition episodes associated with urgency. Eligible women had to have at least one UUI episode, 8 micturition episodes, and 3 micturition episodes associated with urgency per bladder diary day to be included in the study. They were prescribed fesoterodine 4mg OD which could be titrated to 8mg OD after a period of 4 weeks, and were followed-up at 12 and 24 weeks. Further to the bladder diary, participants completed the following questionnaires at each follow-up visit as per baseline: the King's Health Questionnaire (KHQ) and Quality of Life Assessment for Incontinence (CONTILIFE) questionnaire to evaluate the impact of UI on their quality of life and self image, the PISQ12 (Pelvic Organ Prolapse/ Urinary Incontinence Sexual Questionnaire) and SQoL-F (Sexual Quality of Life – Female) questionnaires for the evaluation of sexual function and sexual quality of life, the SF-12, HADS (Hospitalized Anxiety and Depression Scale) and LSI (Life Satisfaction Index) questionnaires to assess patients' perspective of health, anxiety and depression, and life satisfaction respectively. The control group completed all but the KHQ and CONTILIFE at baseline and 24 weeks.

The paired t test was used for comparisons between baseline and end-of-study visit in both the treatment and control groups, while the 2-sample t-test was used for comparisons between the treatment and control groups.

Results

Results are presented from 12 women who completed the 24-week treatment period and 17 women from the control group.

Baseline comparisons: Incontinent women (treatment group) had worse sexual function compared to the control group (PISQ12 total score 32.1±6.1 vs 37.9±4.4, p=0.006). PISQ12 subscores concerning Emotional and Behavioural sexuality (p=0.006) and Physical sexuality (p=0.027) were also affected but no significant differences were noted in PISQ12-Partner relationships score (8.4±1.4 vs 7.9±1.6, p=0.419), SQoL-F scores (73.4±24.3 vs 82.9±13.4, p=0.186), SF12 (Physical: p=0.085, Mental p=0.853), LSI (p=0.541) and HADS (Anxiety: p=0.824, Depression: p=0.644).

Effect of treatment: Treatment with fesoterodine improved parameters from the bladder diary, KHQ and CONTILIFE, as well as PISQ12 scores. More specifically, micturition frequency (12.3±5.7 vs 9.0±3.4, p=0.001), numbers of pads/diapers used (4.3±2.8 vs 0.9±1.1, p=0.003), percentage of urgency episodes (54.4±21.5% vs 31.1±22.5%, p=0.003) and percentage of incontinence episodes (63.4±30.3% vs 25.6±30.8%, p=0.005) were significantly decreased at the end of treatment compared to baseline. Regarding KHQ Domains: General Health (35.4±16.7 vs 27.1±16.7, p=0.039), Incontinence Impact (86.1±17.1 vs 47.2±26.4, p=0.001), Role Limitations (69.4±25.4 vs 27.7±23.9, p<0.0001), Physical Limitations (62.5±33.4 vs 25.0±23.0, p=0.003), Social Limitations (37.9±38.0 vs 11.1±17.7, p=0.018), Emotions (48.1±30.8 vs 16.6±29.3, p=0.008), Sleep/Energy (36.1±36.1 vs 13.8±19.8, p=0.067), Severity Measures (48.6±15.4 vs 22.2±22.5, p<0.0001), Frequency (2.5±0.7 vs 1.4±0.8, p=0.012), Urgency (2.0±1.1 vs 0.8±0.8, p=0.006), Urgency Incontinence (1.5±0.9 vs 0.7±0.8, p=0.005), and Intercourse Incontinence

(0.6 ± 0.9 vs 0.1 ± 0.3 , $p=0.026$) were also improved. Improvements in CONTILIFE Self Image (37.5 ± 18.2 vs 13.6 ± 17.8 , $p=0.001$), Emotional Consequences (57.9 ± 22.9 vs 19.4 ± 27.4 , $p < 0.0001$) and Sexuality (27.1 ± 31.4 vs 6.9 ± 14.6 , $p=0.026$) were also noted. *Sexual function*: PISQ12 total score (32.1 ± 6.1 vs 36.9 ± 3.3 , $p=0.022$) improved, with benefits noted in Physical subscore (15.6 ± 4.3 vs 18.7 ± 1.9 , $p=0.016$) but not in Emotional & Behavioural or Partner Relation PISQ12 subscores. Difference between treatment and control group was no longer significant at the end of treatment (36.9 ± 3.3 vs 39.2 ± 3.7 , $p=0.09$). Importantly, an improvement was also observed in the question 'Does the need of using a pad limit your sexual activity' (2.1 ± 1.6 vs 1.0 ± 1.1 , $p=0.012$). SQoL-F score showed improvement tendency (73.4 ± 24.2 vs 84.6 ± 14.3 , $p=0.09$). No changes were found in SF12, LSI or HADS scores in the treatment group. However, differences in LSI and SF12-Mental health scores between the treatment and control group which were comparable at baseline became significant at the end of treatment ($p=0.008$ and $p=0.023$, respectively).

Interpretation of results

The presence of UUI and OAB symptoms and the use of incontinence protection seem to affect sexual function in peri- and post-menopausal women. Successful treatment of UI and OAB symptoms with fesoterodine seems to improve sexual function, possibly due to ameliorations in physical activity, perceived satisfaction with life and mental health, but not due to improvements in partner relationship or emotional background. Treatment of OAB-incontinence also improved women's self-image, emotional performance and sexuality. Due to the small sample size results can only be considered preliminary and need to be interpreted with caution.

Concluding message

Our preliminary results suggest that the presence of UUI or mixed UI and the use of incontinence protection in peri- and post-menopausal women affect women's sexual function and self-image. Successful treatment of OAB/incontinence with an antimuscarinic appears to improve women's sexual function, sexuality and self-image, possibly via changes in physical activity, perceived satisfaction with life and mental health. Results need to be confirmed in larger patient samples.

Disclosures

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