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IDENTIFICATION OF FACTORS RELATED TO HEALTH-RELATED QUALITY OF LIFE IN WOMEN WITH STRESS URINARY INCONTINENCE THAT MAY IMPROVE WITH SURGICAL TREATMENT

Aims of Study: Surgery, a common treatment for stress urinary incontinence (SUI), is expected both to relieve UI symptoms and improve health-related quality of life (HRQOL). The aim of this study was to identify factors related to HRQOL that might improve in women after SUI surgery

Study Design, Material and Methods: Baseline data from 655 women (mean age 51.9 yrs, SD 10.3yrs) enrolled in a randomized clinical trial to compare the Burch retropubic urethropexy and autologous rectus fascial sling procedures were examined. HRQOL was measured with the Incontinence Impact Questionnaire (IIQ), a condition-specific measure of HRQOL that assesses the impact of UI on activities, roles, and emotional states. The relationship between HRQOL and several variables was explored in the entire cohort with stepwise multivariable regression analyses. Independent variables were entered into the model in the following steps: sociodemographic factors (age, ethnicity, socioeconomic status), clinical measurements (BMI, pelvic organ prolapse stage), health status and history (fecal incontinence, current smoking, urinary tract infections [UTIs], previous UI treatment), and UI symptoms (mean number of accidents, type of incontinence: stress only vs mixed). The final model was repeated in the subgroup of sexually active women (n=450; age 28-81), adding a UI-specific measure of sexual function (PISQ-12) to assess the additive effect of sexual function in explaining variability in HRQOL.

Results: UI symptoms had a moderate effect on HRQOL (mean IIQ total score: 171.4; sd: 101.3), affecting many aspects of the patient's life as indicated by mean IIQ subscale scores between 36-50. Diminished UI-specific HRQOL was related to a higher number of UI accidents, mixed stress and urge incontinence, fecal incontinence, history of UTIs, previous UI treatment, and was more likely in younger and Hispanic women (all $p < .05$). The number of accidents and UI type explained only 4% of the total variance in HRQOL whereas all of these factors together explained 25% of the total variance. Among sexually active women in the sample, greater sexual dysfunction was associated with lower HRQOL ($p < .001$) and explained 9% of the total 36% variance in HRQOL for this sub-group, while number of accidents and mixed UI type explained 5% of the variance.

Interpretation of Results: The HRQOL related to SUI in women prior to surgery for this condition was associated with two factors that are expected to improve as a result of surgery, i.e., higher frequency of UI accidents and sexual dysfunction. Noteworthy is the finding that, in sexually-active women with SUI, sexual dysfunction has a stronger negative impact on HRQOL than do UI symptoms. However, the clinical and demographic variables we studied explained only a small proportion of the variability of HRQOL.

Concluding Message: While UI has a negative effect on a woman's health-related quality of life, these results suggest that many other factors also have an impact. However, successful surgery is likely to result in improved HRQOL for women with stress incontinence.

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