

FACTORS AFFECTING POSTOPERATIVE SEXUAL FUNCTION AFTER ANTI-INCONTINENCE SURGERY

Hypothesis / aims of study

The women with urinary incontinence (UI) have a high risk of sexual dysfunction. The results of sexual function following treatment of UI have been shown inconsistent and confusing results. The effects of surgery for UI on sexual function may show different results according to the subtype or severity of UI, outcome of surgery and complications, etc. The purpose of the study was to investigate the impact of anti-incontinence surgery on sexual dysfunction in women with UI and know the factors affecting postoperative sexual function in women undergoing anti-incontinence surgery

Study design, materials and methods

Eighty-one sexually active women with UI and no concomitant surgery for major gynecologic surgery affecting sexual function such as hysterectomy or prolapse surgery underwent mid-urethral sling (trans-obturator tape) surgery by single operator. Pelvic floor function and sexual activity were assessed by Pelvic Floor Distress Inventory questionnaire (PFDI-20) and Pelvic Organ Prolapse/Urinary Incontinence Sexual Questionnaire (PISQ-12) at baseline and a year after surgery. The Pearson chi-square test and t-test were used for the analysis of categorical variables and continuous variables, respectively. To know the factors affecting postoperative sexual function after adjustment for pre-operative PISQ-12 scores, the significant variables were identified by univariate logistic regression analysis, followed by the multivariate logistic regression analysis.

Results

The prevalence of urodynamic stress incontinence (USI), USI with detrusor overactivity (DO) and mixed UI (MUI) was 8.9%, 25.3% and 65.8%. The proportion of women reporting coital incontinence was 47.5%. The post-operative urinary distress inventory questionnaire (UDI-6) including PFDI-20 demonstrated significant improvement, decreasing from 49.7 ± 26.7 to 9.7 ± 13.9 . Total post-operative PISQ-12 demonstrated significant improvement from 27.1 ± 7.3 to 30.5 ± 6.8 . However, the domain of behavioral-emotive score was not improved. In the univariable regression analysis after adjustment of pre-operative PISQ-12 scores, the factors affecting postoperative sexual function turned out age, history of cesarean section, menopause, medication for menopausal hormone therapy, residual urine volume greater than 30% of total urine volume measured in uroflowmetry, DO proven in urodynamic study, pre-operative UDI-6 score, coital incontinence, MUI and USI with DO proven in urodynamic study. The score between pre- and post-operative PISQ-12 revealed linear relationship: $Y(X_i) = b_0 + b_1 X_i$, the residualized score $Y_i - Y(X_i)$ was calculated. Multiple linear regression model analysis for factors affecting post-operative sexual function with age, menopause, DO proven in urodynamic study, pre-operative UDI-6 score, coital UI was performed. The factors affecting postoperative sexual function were revealed as DO, coital UI and pre-operative UDI-6 scores.

Interpretation of results

The sexual function was improved after anti-incontinence surgery. The presence of DO, coital UI and higher pre-operative UDI-6 score significantly deteriorated sexual function after anti-incontinence surgery. Coital incontinence is a challenging condition in the spectrum of SUI or severe form of DO as the exact mechanism and pathogenesis remain conflicting. This study can make a conclusion that sexual function improved after anti-incontinence surgery leading to improvement of urethral sphincter incompetence. The strength of this study is the introduction of concept of residualized score of sexual function in the statistical analysis. The limitations are single questionnaire of PISQ-12 can not reflect the multi-dimensional diversity of sexual function and hospital based small cases study prevents to generalize our finding to the general population.

Concluding message

The anti-incontinence surgery improved post-operative sexual function. The factors affecting postoperative sexual function were revealed as DO, coital UI and pre-operative UDI-6 scores. Systematic research about sexual function in women with UI undergoing anti-incontinence surgery (TOT) is needed in consideration with multi-dimensional aspects of female sexuality

Disclosures

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