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FACTORS ASSOCIATED TO URGE URINARY INCONTINENCE PERSISTENCE AFTER SURGERY FOR STRESS URINARY INCONTINENCE

Hypothesis / aims of study

Mixed urinary incontinence (MUI) is the complaint of involuntary leakage associated with urgency and also with exertion, effort, sneezing or coughing. This combination of the stress and the urge component makes it a difficult condition to treat in our clinical practice. One of the clinical consequences after stress urinary incontinence (SUI) surgery in women with MUI is the persistence of Urge Urinary Incontinence (UUI). The aims of our study were to quantify the persistence rate of UUI in women suffering from MUI and to identify clinical factors associated to this outcome after SUI surgery.

Study design, materials and methods

Prospective cohort study carried out in 35 Pelvic Floor Units. Women with MUI with indication for SUI surgery (group 1) and women with MUI without indication for SUI surgery as controls (group 2) were recruited for the study. All patients gave their written informed consent to participate. Baseline and follow up (at least after six months from surgery in group 1 and baseline (group 2) data included Epidemiology of Prolapse and Incontinence Questionnaire (EPIQ), International Consultation on Incontinence Questionnaire-Short Form (ICIQ-SF), Bladder diary (recording daytime and night-time micturition frequency, number of incontinence and urgency episodes/24hours, number of pads used /24hours, and fluid intake), pelvic examination and clinical data. Urodynamic study was undergone previous and after SUI surgery if routine clinical practice.

UUI persistence rate was calculated as the percentage of women suffering from UUI at follow up according to EPIQ (item 21 and 25 respectively). To identify clinical factors associated to UUI persistence baseline clinical characteristics of group 1 population were analysed using the Mann-Whitney test (quantitative variables) or Chi Square Test (qualitative variables).

Results

235 women with MUI were analysed: 163 women from group 1 and 72 from group 2. Patients from group 1 were followed up after a mean time(SD) of 7.23(3.36) months. Transobturator slings was the surgery procedure for SUI carried out in 125 cases (76 cases without and 49 cases with UUI persistence at follow-up); minislings in 21 cases; retropubic slings in 9 cases. 59 women had both SUI and POP surgery (46 procedure without sling). At the end of the study, 38.6% of patients (group 1) versus 58.3% (group 2) had persistence of UUI. When population from group 1 was analysed based on UUI persistence or not UUI persistence was associated with older women (mean (SD): 59.63(12.23) versus 55.47(12.26) years old, $p=0.028$) and a higher BMI [28.73(4.68) versus 27.29(4.22)]. There were more patients with previous POP surgery in the population with UUI persistence (7 cases versus 1, $p=0.005$). There was no statistical difference regarding ICIQ-SF mean total score [15.48(3.49) and 15.53(3.11); $p=0.865$]. Urinary symptoms (urgency, frequency and nocturia) assessed by EPIQ and number of urgency, incontinence, micturition and nocturia episodes/24h by bladder diary were comparable in both subgroup populations ($p=NS$). Mean (SD) maximum cystometric capacity [380.19(122.12) and 346.72(101.32)] and mean (SD) detrusor pressure [14.00(12.21) and 10.84(10.31)] were not statistically different in both subgroups (this analysis was available for 90 patients with Urodynamic study)

Interpretation of results

In our study population, an older age, a higher BMI and previous POP surgery were the baseline characteristics significantly associated with UUI persistence after SUI surgery.

Concluding message

When treating surgically women with mixed urinary incontinence, it is important to take into account factors as age, higher BMI and previous POP surgery as can contribute to persistence of UUI.

Disclosures

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