

IS THE EFFICACY OF PELVIC FLOOR MUSCLE REHABILITATION FOR URINARY STRESS INCONTINENCE AGE-RELATED? A REVISION OF 170 WOMEN.

Aims of Study

Pelvic floor rehabilitation is generally considered appropriate for women with mild-to-moderate stress incontinence. Female urinary incontinence affects approximately 5% of younger women to nearly 50% of elderly women. Success of pelvic floor muscle training, that is integrated on the physical therapies, depend partly on ability to perform a correct voluntary muscular contraction. Authors reported that 50% of women were unable to perform a correct voluntary pelvic floor muscular contraction following brief verbal instruction. As the presence of high body mass index, previous pelvic surgery, strong levator muscles and urethral hypermobility appeared to be poor prognostic features. So research for finding factors correlated with efficacy in conservative urinary stress incontinence is still active.

Aim of the study is to evaluate if the efficacy of pelvic floor muscle is age dependent. To obtain these data we reviewed a series of 170 consecutive patients suffering from mild to moderate urinary stress incontinence.

Methods

From June 1999 to June 2002 a total of 218 women were inserted in a pelvic floor rehabilitation program for stress and urge urinary incontinence. All of them underwent a complete work-up for incontinence: anamnesis, physical and vaginal examen, urinalysis, complete urodynamic test, diary minction test. The Ingelman Sundberg scale (I.S.) was used for the classification of urinary stress incontinence. The Baden-Walker classification (HWS) was used for organ prolapse evaluation. The same procedure was applied to all the patients affected by urinary stress incontinence, consisting of 10 séances twice weekly, during which patients were subjected to physical therapy, biofeedback and vaginal electrical stimulation of 20Hz frequency. In case of urge or mixed incontinence the vaginal electrical stimulation was modified to 10 Hz frequency using the same timing for stress group.

A selection of 170 patients, 54.8 ± 11.1 years old (mean age \pm SD), (min 33 – max 81 years old) with a mean parity of 1.6 ± 0.8 deliveries, suffering from mild to moderate urinary stress incontinence were divided in two groups using, as an arbitrary cut-off, the age of fifty years old. We recall all 170 women to obtain a subjective evaluation of their continence in terms of leakage and pads used. They were classified as cured when referred no leakage, as improved or worsened in comparison with the previous incontinent condition.

Results

One hundred and twenty eight women were classified in Group 1 of stress incontinence, 42 belonged to Group 2 of I.S. scale. The HWS presented a minimal presence of anterior and posterior prolapse (max score was 2). Of the 170 women 113 were over fifty years old and 57 were under fifty. The mean follow-up period was 18.7 ± 12 months (min 3 – max 38).

In the pre-treatment evaluation 79 patients (69.9%) were classified in the 1 I.S. scale and 34 patients in the 2 I.S scale (30.1%) for the over-50 group. In the group under-50 years old 49 patients (85.9%) were in the 1 I.S. scale and 8 patients (14.1%) in 2 I.S. scale.

The results demonstrated in the over-50 group that 76.1% were cured, 6.2% improved continence and 17.7% worsened. In the under-50 group 94.7% were cured and 5.3% worsened.

Conclusions

The comparison of two groups of patients affected by urinary stress incontinence only separated by age seems to present a real factor of difference supporting the efficacy of rehabilitation program. It is quite obvious that in younger women the exercise of pelvic floor muscle, the attention to the biofeedback method and the major recruitment of muscular fibre by electrical stimulation are a very efficient method to cure mild-to-moderate stress

incontinence. This is to confirm also that the behavioural education in young women could be a sensible and curative method. We have chosen fifty years as cut-off only on the basis of an arbitrary concept of human mean life and the beginning of menopausal period. The variation of the cut-off up or down doesn't modify the results. Nonetheless in older women the rehabilitation of the pelvic floor muscle is efficient but it depends on several negative factors all under the influence of age.