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# OUTPATIENT PELVIC FLOOR EXERCISES VERSUS HOME BIOFEED BACK (PELVEX®)

## Hypothesis / aims of study

The aim of the study was to compare the effectiveness of intensive pelvic floor exercises and a new type of biofeedback home trainer (PELVEX) for the treatment of stress and mixed urinary incontinence in females.

## Study design, materials and methods

Randomised prospective single-blinded (doctors) comparison of two therapeutic interventions consisting of a conventional pelvic-floor exercise program (PF-group) once a week for eight weeks and home training for four weeks in one group (PX-group) using the biofeedback home trainer PELVEX for 4 weeks and unsupervised home-training without PELVEX for eight weeks in an outpatient clinic of a large university hospital.

Fifty women, referred by gynaecologists for non-surgical treatment of stress urinary incontinence and mixed urinary incontinence were included. They were randomised in two groups by an independent randomisation centre.

Examination included history, complete urodynamic measurement, one hour-PAD-test, perineometry measurements, the ICI-Q-SF-questionnaire and a self administered questionnaire for motivation (Q-MOT) and were done at initial presentation, after 4 weeks, 12 weeks, 6 and 12 months.

We chose PAD-test and the ICI-Q-SF-questionnaire as primary, clinical stress test, the Q-MOT and perineometry as secondary endpoints.

## **Results**

After 12 weeks we noticed a drop out of 26 patients. 6 month after beginning 8 women (4:4) came for control and after 1 year only 4 women (3:1) completed the study.

In the PX-group the PAD-test results improved after 3 month from 25,24 g to 9,8g, in the PFgroup from 39,35g to 20,96g, respectively. In the ICI-Q-SF-questionnaire the patients documented an improve of quality of life in the PX-group of 3 %, in the PF-group in 13%, respectively.

Improvement of muscle strengh could be found after using PELVEX-home trainer in 2,5% and after pelvic floor training in 2,9%, respectively.

The clinical stress test became negative in 20% in the PX-group and in 23% in the PF-group. With the Q-MOT-questionnaire an increase of motivation for doing the exercises was found after 3 month in 35,2% and 27,1% respectively.

## Interpretation of results

Allthough the results of improvement were very impressive, we were astonished by the high drop out rate in our study because we never find in the literature. The drop out rate was the same in both groups. We contacted these patients by phone for asking the reasons and found three groups. One with so much improvement, one had no time for controll and the last group because of incomfortableness of the home trainer PELVEX.

## **Concluding message**

In this pilot study conservative therapy was very successful in stress urinary incontinence in motivated women. There was no significant difference in conventional pelvic-floor exercise and the hometrainer therapy. For the future we must find instruments for better motivation of our patients.