

RESULT OF PELVIC FLOOR EXERCISES, WITH BIOFEEDBACK THERAPY, FOR TO GROUPS OF PATIENTS SUFFERING FROM URINARY TRESS INCONTINENCE. AND COMPARING ONE GROUP WITH MAJOR WEAKNESS AND ONE GROUP WITH MINOR WEAKNESS.

Aims of Study

To compare two groups of patients, one with major pelvic floor muscle weakness and the other with only minor weakness.

To improve exercises for pelvic floor muscles to make them more effective in overcoming and preventing urinary stress incontinence.

In our hospital, we have instructed patients in exercises for pelvic floor muscles for about last 10 years. But as patients with pelvic floor muscle weakness have less control over their vaginal vaginal sphincter contraction, for them carrying out the exercises was a problem. As a result many patients gave up the course of exercises and consequently there was no improvement in their symptoms.

The study aimed to assess the effect of the exercises on patients with urinary stress incontinence, by comparing two groups, one group included patients with major muscle weakness and the other with minor muscle weakness. In the study EMG controlled biofeedback and questionnaires were used.

Methods

The study was conducted in the period May 2000 to February 2002 and covered 26 female patients, who had been diagnosed by a urologist, as having urinary stress incontinence, aged between 26 and 80.

There were 12 patients in the major weakness group with an average age of 58.1 ± 10.6 and an EMG value under $19 \mu V$. In the minor weakness group there were 14 patients with an average age of 61.5 ± 11.5 and an EMG value over $20 \mu V$.

The patients received weekly instruction in the exercise for 6 weeks.

The effects of the exercises were assessed by comparing the patients' situation at the beginning and end of the exercises based on EMG values, amount and frequency of urine leakage, the 60 minutes pad test, the number of absorbent pads used and changes of under wear, plus a questionnaire to gauge the degree to which the patients had mastered the exercises, also to assess their motivation and to see whether there had been any improvements in their vaginal and contractions. The King's health QOL questionnaire was also used.

Results

Before the exercises there were no significant differences between the two groups.

For the major weakness group EMG value increased and the amount and frequency of urine leakage showed a decrease, likewise the 60 minutes pad test. Motivation for the exercises and mastering them improved and so did the control of contractions. The King's health QOL questionnaire showed improvements as regards limit on their lives.

For the minor weakness group the amount and frequency of urine leakage, the number of absorbent pads used and changes of under wear, the 60 minutes pad test showed a decrease. Also recognition and control of contractions improved. The KHQ showed less negative effects on QOL.

After the 6 weeks of exercises there were no significant differences between the two groups.

Discussion

In both groups urinary incontinence symptoms and other aspects showed improvement.

It was possible to assess the effects of the exercises on patients by biofeedback and to maintain a high level of motivation by regular weekly lessons. By inserting probes with electrodes into the patients' vaginal during the exercises, it was easy to test their vaginal sphincter contractions.

Conclusions

The major weakness group had their feelings of contraction restored with the use of biofeedback and on this there was no significant difference between the two groups.

With the pelvic floor exercises and the use of biofeedback, it was possible to realize positive effects for the patients in groups.