Biofeedback and Functional Electric Stimulation in the Treatment of Genuine Stress Incontinence

Jong Hyun Kim, Ju Tae Seo, You Sik Lee

Department of Urology, Samsung Cheil Hospital,
College of Medicine, Sung Kyun Kwan University

Objectives: The purpose of this study is to evaluate the efficacy of biofeedback and functional electric stimulation in stress incontinence patients as a physiotherapy and to know which factors affect the outcome.

Methods: A group of 65 patients with stress incontinence were treated with combined alternating biofeedback and intravaginal electric stimulation during 12 sessions, each 21 minutes long, during 6 weeks. All patients had type I or II stress incontinence.

Results: At immediate post treatment, subjective cure (complete dryness) was 15% and improvement (recovery to avoid other forms of treatment) was 60% and failure 25%. Thus, the overall success rate for this treatment was 75%. In 49 patients who had all scheduled sessions and good compliance, subjective cure was 14% and improvement was 71%, but in 16 patients not to have good compliance, cure was 19%, improvement was 25%. In compliant patients, the result of 3 months after treatment showed cure was 11%, improvement was 54%. Compliance with treatment was the most significant para-

meter predictive of a good outcome ($p < 0.01$) and the degree of stress incontinence was also significant in compliant patients ($p < 0.05$). No clinical correlation with outcome was found in age, type, severity of cystocele, pelvic muscle strength, initial degree of vaginal contraction. Intravaginal pressure increased by an average of 10 cm HO. Increased vaginal pressure was found in 93% of the patients and an average of 10 cm HO. Increased vaginal pressure was found in 93% of the patients and at least 50% improvement was 61%. Urge incontinence and urgency were present in 10(15%) and 19(29%) of the patients and improvement including cure was found 90% in urge incontinence and 89% in urgency.

Conclusions : Biofeedback and functional electric stimulation is more effective for the patients who have good compliance, low degree stress incontinence and combined bladder irritation symptoms. In order to maintain good results, a well structured biofeedback and functional electric stimulation program that teaches specific muscific muscle exercise should be used and the patients should be followed by a maintenance program and reinforcement.

Key words : stress urinary incontinence, biofeedback, electric stimulation