

## **BIOFEEDBACK PHYSICAL THERAPY FOR CHRONIC PELVIC PAIN SYNDROME TYPE 3**

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**INTRODUCTION & OBJECTIVES:** Men with chronic pelvic pain syndrome (CPPS) type III experience chronic pelvic pain of uncertain aetiology with varying degrees of urinary symptoms. Recent studies suggest that the symptoms of CPPS type III may be due to or associated with pelvic floor muscle dysfunction. Therapies such as biofeedback physical therapy and pelvic floor re-education, aimed to improve relaxation and proper use of the pelvic floor muscles, are expected to give symptom improvement. The objective of this prospective study was to evaluate the effect of biofeedback physical therapy on the symptoms of men with CCPS type III.

**MATERIAL & METHODS:** Between March 2000 to March 2004, 33 consecutive men who were diagnosed with CPPS type III participated in a pelvic floor biofeedback re-educating program. Diagnosis was based on history including the National Institutes of Health Chronic Prostatitis Symptom Index (NIH-CPSI) questionnaire, physical examination including pelvic floor muscle tonus, urine analysis, uroflowmetry with residual urine measurement and transrectal ultrasonography of the prostate. The NIH-CPSI total score is a valid, reliable and responsive measure of prostatitis symptoms and was therefore used for diagnosis and to monitor the effect of therapy. Moreover, pelvic floor muscle tonus measurements were used not only to complete diagnosis but also to monitor the effect of the biofeedback physical therapy. For statistical analysis the Wilcoxon signed ranks test for paired samples was performed.

**RESULTS:** Two of the 33 men dropped out. In the remaining 31 men, mean age 45 years (range from 25 years to 70 years) the mean total NIH-CPSI changed from 24 (range 16-34) at baseline to 13 (range 1-25) after treatment ( $p < 0001$ ). Regarding the specific domains of the NIH-CPSI, a significant decrease was seen in all sub domains. The mean value of the pelvic muscle tonus, (normal value 1 mV), was 4.4 at diagnosis (range 2-10) and decreased to 1.6 (range 0.5-2.8) after treatment ( $p = 0.002$ ).

**CONCLUSIONS:** Our study clearly demonstrates the significant effect of biofeedback physical therapy and pelvic floor re-education for CP/CPPS type III patients. The observation that the EMG results correlated with the NIH-CPSI score appears to emphasize that the pelvic floor plays an important role in the pathophysiology of CP/CPPS type III.