Effects of Autogenic Training in Patients with Chronic Pain

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Abstract

Background: Chronic pain patients require psychiatric as well as physical medication, such as pharmacotherapy and nerve block therapy. It is also important that the patients is able to perform active treatments for chronic pain themselves. Autogenic training, a systematic self-training method developed by J. H. Schultz, is expected to become an active treatment for easing chronic pain. In the current study, we applied autogenic training in chronic pain patients and investigated changes in the level of pain, mental condition and autonomic function in a randomized controlled trial.

Objectives and Methods: Chronic pain patients who had visited the Fukuoka University Hospital pain clinic for more than 90 days were assigned to two groups: an experimental group (N=17, HRV: N=11) and a control group (N=19, HRV: N=12). We conducted autogenic training in the experimental group three times over four weeks and evaluated changes in the Pain Disability Assessment Scale (PDAS), Profile of Mood States (POMS), Visual Analog Scale (VAS) of pain, blood pressure and heart rate.

Results: In the experimental group, the HF components of HRV showed a marginally significant increase $(U=35.0\ p=0.056)$ compared with that observed in the control group. According to the subgroup analysis, the patients whose chronic pain resulted from factors other than injury showed a decrease in the VAS of pain $(U=59.0\ p=0.031)$ after receiving autogenic training. In addition, the patients with a history of psychiatric consultation showed a decrease in heart rate $(U=53.5\ p=0.020)$ after the training.

Conclusions: This research suggests that autogenic training activates the parasympathetic nervous system in chronic pain patients. Autogenic training has the potential to be effective for achieving pain relief and decreasing the heart rate in some chronic pain patients.

Key words: autogenic training, chronic pain, VAS of pain, heart rate variability