

IV. Fundamental Science Section

1. ABDOMINAL BREATHING TRAINING THROUGH RESPIRATORY BIOFEEDBACK IN ORDER TO REDUCE ANXIETY

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Introduction. Anxiety causes considerable impairment in patients and remains one of the most common complaints in primary care. Family physicians are often in a position to seek the most effective treatment for patients, including free method such as biofeedback. Biofeedback is a therapeutic tool to facilitate the self-regulation of autonomic functions to improve health. The method of respiratory biofeedback is based on performing voluntary controlled respiratory movements in the form of a special breathing pattern. Multiple researches in respiratory biofeedback, however, have very few references to the influence of biofeedback training on the parameters of the respiratory pattern and their connection with the level of anxiety in healthy people. This is the purpose of the present work.

Aim of study. Respiratory training in order to reduce anxiety involves abdominal breathing with a rate of 6 breaths per minute. The start of the respiratory cycle phases (inspiration/ expiration) was given by the sound of the metronome, so that the ratio between the duration of inspiration and that of expiration was strictly maintained from 4 seconds up to 6 seconds. Thus, the participant's goal was to limit the amplitude of thoracic movements and increase the amplitude of abdominal movements, using the instant visual feedback provided by the VISURESP application. The selected sample breathed according to this special program for a period of 14 days, daily with a duration of 15 minutes. There was a significant reduction in anxiety in the majority of participants included in the study (75%).

Methods and materials. A biofeedback respiratory method, VISURESP application was used to see instant visual feedback. The selected sample breathed according to this special program for a period of 14 days, daily with a duration of 15 minutes. It involved patients with anxiety.

Results. There was a significant reduction in anxiety in the majority of participants included in the study (75%).

Conclusion. The results of the current study allow to recommend the method of respiratory biofeedback in the complementary treatment of various anxiety disorders. At the same time, the results of the research open up the perspectives of training implementation through respiratory biofeedback as an effective method of prophylaxis and treatment of the suprapontine disorders of the central nervous system.