

## THE EFFECTS OF EEG-NEUROFEEDBACK ON ADHD SYMPTOMS AND EEG PARAMETERS

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**Introduction:** EEG-neurofeedback is used as a component of therapy in patients diagnosed with ADHD. The efficacy of NF on inattentive symptoms has been previously suggested.

**Objective:** The aim of the study was to assess the efficacy of 20 sessions training of eeg-neurofeedback (NF) in patients suffered from ADHD.

**Methods:** The studied group consisted of 44 patients (34 boys and 7 girls). To determine the efficacy of EEG-B on symptoms intensity, The Symptoms of ADHD Questionnaire was used: before the treatment and after 20 sessions of NF. NF trainings took place once or twice a week. The trainings were conducted based on two protocols: theta/beta and theta/SMR for left hemisphere and for right hemisphere, respectively. The changes in theta/beta and theta/SMR ratios were estimated to assess the influence of NF on eeg parameters.

**Results:** The significant reduction in symptoms intensity was found after 20 sessions of NF. Theta/beta and theta/SMR ratios median values have been significantly decreased.

**Conclusions:** The results of the study indicate the 20 sessions NF training being efficacious in reduction of the intensity of ADHD symptoms. The improvement of eeg parameters responsible for attention functions was also observed.