P-292 - TRAINING PROGRAM BY MEAN NIRHEG AND NEUROBIOFEEDBACK IN ADHD STUDENTS

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Currently, there are many drugs to treat Attention Deficit Disorder with Hyperactivity. In addition, what has prover to be complimentary to drug therapy is behavioral training for parents and teachers as well as training on social skills and behavioral modification. Current studies using nir-HEG (blood activity), which, significantly differentiate ADHD children in the control group and the combined and inattentive subtype for the variable Fp1, associated with executive control. The instrument nir-HEG instrument allows the training of cortical activation favoring the increase of the latter. In 2000, Toomim et al performed a treatment study with a group of 26 subjects. Most (14) had been diagnosed with ADHD and each participant was submitted to an evaluation of 10 sessions (in three areas of the prefrontal cortex). Participants in the experimental group showed a gain of nearly one standard deviation in TOVA. In this study, a five-subject design case was employed and ten sessions of HEG were administered. However we show another results contrasting nirHEG measures (ratio, attention index) with another attention measure. Data showed positive gain indicating success when increasing the biofeedback signal. For example children trained with HEG, gain a significant improvement in terms of selective and sustained attention. However, the gain of the experimental group at the end of training is important and can amount to 31.5%. The results open a scope of great interest to be more precise in the intervention from the behavioral and pharmacological point of view.

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