## SLORETA FINDINGS IN PATIENTS WITH PANIC DISORDER, CHANGES AFTER COMBINED THERAPY - PILOT STUDY

D. Kamaradova, J. Prasko, M. Cerna, A. Grambal, D. Jelenova, K. Latalova, Z. Sigmundova

Department of Psychiatry, Faculty of Medicine and Dentistry, University Palacky Olomouc, University Hospital Olomouc, Olomouc, Czech Republic

**Introduction:** Panic disorder is frequent psychiatric disorder characterized by sudden and unexpected onset of a panic attack, characterized by terror or impending doom, and associated with many somatic symptoms. Panic is considered as a state of hyperarousal, the EEG has had a prominent place in anxiety studies. sLORETA (standardized low resolution brain electromagnetic tomography) is now widely used research method investigating the electrical activity of the brain with zero localization error and ability to reconstruct multiple resources.

Objectives: EEG may be useful toll in looking for predictors to therapeutic response.

**Aims:** The study aimed at finding electrotomographic differences between patients with panic disorder who respond to combined therapy.

**Method:** We measured patients with Panic disorder. Diagnosis was confirmed by M.I.N.I. (MINI-international neuropsychiatric interview). Patients were treated both by psychotropics and CBT (cognitive behavioral therapy) for six week. The symptoms intensity was assessed using BAI (Beck Anxiety Inventory) and BDI (Beck Depression Inventory). They were also examined by EEG. It was measured in rest state with closed eyes, using standard 10-20 montage with 19 electrodes. Measurements were carried out at the beginning and after 6 weeks of therapy.

**Results:** We found decreased absolute power in alfa-2 (10.5 - 12 Hz) activity in anterior cingulated, and increased absolute power in beta-3 (21.5 - 30 Hz) activity in superior frontal gyrus.

**Conclusions:** Our findings suggest that cognitive behavioural psychotherapy can cause changes in brain activity. **Supported by:** IGA MZ CR NT 11047-4/2010