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TREATMENT EFFECT OF COGNITIVE BEHAVIORAL PSYCHOTHERAPY IN PANIC DISORDER - FMRI STUDY

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Introduction: The aim of our study was the correlation of regional brain activity with intensity of psychopathology and the correlation of treatment effect of CBT in patients suffering from panic disorder.

Method: Five patients suffering from panic disorder and five healthy controls were studied in fMRI during the exposition of threat-related words compared with neutral words and emotional faces compared with fixation points. Inpatients were treated with CBT (Cognitive Behavioral Therapy) and existing pharmacotherapy for 6 weeks. Patients were studied in fMRI scanner before and after the treatment. Psychopathology was assessed using Beck Anxiety Inventory (BAI) and Beck Depression Inventory (BDI), The Clinical Global Impression rating scales (CGI), Panic Disorder Severity Scale (PDSS), Dissociative Experiences Scale (DES). Data were analyzed using software for functional magnetic analysis (AFNI) and compared with psychopathology rating scales.

Results: Hyperactivity of cerebellum in patient treated with CBT compared with healthy controls was observed after activation by anxiety words and faces. The scores of psychopathology rating scales decreased in patient treated with CBT and correlates with decrease of hyperactivity in cerebellum.

Conclusion: Changes of brain activity in fMRI after the CBT treatment were observed in patient suffering from panic disorder. Threat-related words and emotional faces showed cerebellum hyperactivity in patients compared with healthy controls. Decrease of cerebellum hyperactivity was observed after treatment with CBT, compared with healthy controls.

Predictor of therapeutic response in fMRI was not find. Cerebellum play an important role in panic disorder.

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