

P02-146 - NEUROBIOLOGICAL ASPECTS OF THE PSYCHOTHERAPY OF OBSESSIVE-COMPULSIVE DISORDERS

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Introduction: Following consensus on a fronto-striato-thalamo-frontal dysfunction as the neuronal basis of the pathogenesis of obsessive-compulsive disorder, neurobiological psychotherapy research is concentrating increasingly on recording the neuronal modification mechanisms induced by psychotherapeutic intervention.

Method: A systematic literature search was used to identify original papers that studied the effects of psychotherapy on the neuronal activation patterns correlating with obsessive-compulsive disorder.

Results: As a consistent result in patients with obsessive-compulsive disorder, a reduction in activity in the caudate nucleus was measured after a successful response to behavioural therapy in those studies that did not use any psychological simulation test. Moreover there is evidence of an altered correlation between the orbitofrontal cortex (OFC), the caudate nucleus and the thalamus after a symptom improvement induced by psychotherapy, and also an improved recruitment capability by those cortex areas that play an important role in cognitive processes, such as the cerebellum and the dorsolateral prefrontal cortex (DLPFC).

Discussion: It can be shown that neuronal activation patterns in the brain are modifiable by psychotherapeutic interventions. It is unclear why these changes in the case of obsessive-compulsive disorder are similar to those produced by pharmacological treatment whereas in the case of depression, for example, heterogeneous results are observed in this respect. Furthermore, the methodological background of the neuro-imaging methods is critically analysed and future research strategies for neuroscientifically oriented psychotherapy research are indicated.