

Neurobiological aspects of psychotherapy in OCD

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Patients with obsessive compulsive disorder often demonstrate profound functional dysregulations compared to healthy subjects especially in fronto-striato-thalamic brain areas. These functional anomalies seem to be related to the symptomatology of the patients.

In the present study we focused on functional responses related to OCD-associated pictures and their changes during psychotherapy. In addition, the functional MRI results were combined with self-assessment ratings of the patients. The results of the patients demonstrated increased responses especially in the anterior cingulate cortex, supplementary motor area, the dorsolateral prefrontal cortex, insula, thalamus, cuneus and parieto-occipital areas before treatment during the presentation of OCD-relevant information. These responses decrease considerably during psychotherapy. The comparison of fMRI results and self-ratings revealed that the functional brain responses change during different phases of the therapy. These results may indicate that different therapeutic processes may be related different brain responses.