

Functional disconnection of the semantic networks in schizophrenia.

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Patients with schizophrenia exhibit deficits in semantic processing, which can form the basis of thought disorders. The objective of this study was to explore functional connectivity between the activated areas during semantic processing in schizophrenia. Twelve patients with schizophrenia and 12 healthy controls were studied with [15O]H₂O positron-emission tomography during semantic judgment. The expected activation in the left inferior occipitotemporal cortex significantly correlated with several other regional activations in normal study participants, but with no other regional activations in patients with schizophrenia. This finding suggests that schizophrenia involves a disconnection of semantic networks. The resultant distortion in semantic processing may have an impact on thought disorders.

PMID: 15729137 [PubMed - indexed for MEDLINE]