

PW01-141 - **BRAIN DYSFUNCTION IN SCHIZOMANIC PATIENTS VERSUS HEALTHY CONTROLS: A FMRI STUDY**

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Objectives: Functional brain activity has been only studied marginally in schizoaffective disorder (SAD), a disorder whose nosological status is controversial. The present study investigated the prefrontal cortex (PFC) activity of schizomanic patients during performance of a working memory task.

Method: 13 schizoaffective patients, with current schizomanic episode (Young > 18); and 26 sex- and age-matched healthy controls underwent functional magnetic resonance imaging (fMRI) while performing baseline, 1-back and 2-back versions of the n-back task. Linear models were used to obtain maps of activations and deactivations in the groups.

Results: During performance of the n-back task, controls showed activation in a cluster of frontal areas and de-activation in the medial orbitofrontal and anterior cingulate cortex. The SAD patients showed significantly less activation in prefrontal areas than the controls. They also showed a marked failure to de-activate in medial frontal cortex. The SAD patients' impaired task performance was associated with both reduced activation of the dorsolateral PFC and reduced de-activation of the medial frontal areas.

Conclusions: Schizomanic patients show failure of activation in a network of cortical regions, and also a failure to de-activate the ventromedial PFC and anterior cingulate cortex. This latter area corresponds to the one of the components of the 'default mode network'. This pattern of abnormality is similar to that found by our group to characterise schizophrenia (failure to activate and failure to de-activate), but different from that which characterises manic patients (failure to de-activate only).