

S25-04 - Neuroanatomical and neurofunctional correlates of the transition from at-risk state to full-blown psychosis

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In early stage psychosis research the identification of neurobiological correlates of vulnerability to schizophrenia is an important hurdle. Structural and functional imaging techniques have shown the potential to clarify the correlates of an increased vulnerability to psychosis and to address the changes underlying transition from a prodromal state to a first episode of disease. sMRI studies found decreased prefrontal, cingulate, insular and cerebellar gray matter volume in high risk subjects with transition(HR-T) as compared to high-risk subjects without transition (HR-NT). Meta-analysis revealed relatively larger whole brain volumes in HR-T compared to HR-NT subjects. Compared to HR-NT, HR-T subjects showed in functional imaging studies reduced brain activation in prefrontal cortex, reduced neuronal density, increased membrane turnover in frontal and cingulate cortex. Structural and neurochemical abnormalities in prefrontal, anterior cingulate, medial temporal and cerebellar cortex might be predictive for development of psychosis within high risk subjects.