

P-787 - CORTICAL SIGNATURE OF NEUROLOGICAL SOFT SIGNS IN RECENT ONSET SCHIZOPHRENIA

D.Hirjak¹, R.C.Wolf¹, B.Stieltjes², U.Seidl³, J.Schröder¹, P.A.Thomann¹

¹Department of General Psychiatry, University of Heidelberg, ²Division of Radiology, German Cancer Research Center, DKFZ, Heidelberg, ³Center for Mental Health, Klinikum Stuttgart, Stuttgart, Germany

Background: Minor motor and sensory deficits or neurological soft signs (NSS) are frequently found in patients with schizophrenia at any stage of their illness. Numerous structural magnetic resonance imaging (MRI) studies repeatedly revealed accentuated thinning of cortical mantle in schizophrenia. However, whether NSS are related to alterations of cortical thickness has so far remained mostly unexplored.

Method: Whole brain high-resolution MRI at 3 Tesla was used to investigate cortical thickness in twenty five patients with recent-onset schizophrenia. Cortical reconstruction was performed with the Freesurfer image analysis suite. NSS were examined on the Heidelberg Scale after remission of acute symptoms and related to cortical thickness. Age, education, medication and duration of illness were considered as potential confounders.

Results: Higher NSS scores were associated with decreased cortical thickness in multiple areas. Significant correlations were found in somatosensory and primary motor cortex, pre-motor area and temporal lobe. Our results confirm the hypothesis of significant relationship between alterations of cortical thickness and the extent of NSS in schizophrenia.

Conclusion: Our findings provide new insights into the association of NSS with brain morphometric alterations and an involvement of cortical thickness in schizophrenia.