

## MEMORIAL SYMPOSIUM – PROF GERD HUBER

# PATHOMORPHOLOGY OF SCHIZOPHRENIA – G. HUBERS CONTRIBUTION

Professor BERNHARD BOGERTS

Director of the Department of Psychiatry, Psychotherapy and Psychosomatic Medicine  
University of Magdeburg, Germany

After the failure of classical neuropathology performed by the Vogts and others in the first half of the last century to demonstrate convincingly pathohistological alterations in brain of patients suffering from schizophrenia, early neuroradiological studies using pneumencephalography (PEG) were more successful in revealing structural brain changes in psychotic patients. The most important synopsis of these early PEG-studies was given in G. Hubers monography on chronic schizophrenia published in 1961.

Huber himself performed PEG-investigations in large numbers (>200) of chronically hospitalized schizophrenics and described various types of ventricular enlargement as well as widening of cortical sulci and fissures; moreover, he related these findings to clinical subtypes of schizophrenia and several degrees of chronicity.

Hubers findings of ventricular and cortical sulcal enlargement and the correlations to the severity and chronicity of the disease were not generally accepted during that time because it was difficult to compare the data from patients with those from normal controls. Moreover the “Zeitgeist” (meaning the prevailing opinion during that time) clearly favoured psychoanalytical and psychosocial theories of psychosis.

Meanwhile Hubers early findings of brain pathology in schizophrenia were confirmed by an enormous number of CT and MRI studies as well as by post mortem findings, that clearly demonstrated a large variety of brain pathology in schizophrenia as biological components that predispose to the disease. Still unsolved are questions on the causes of these quite inhomogenous structural changes. Some theories related to neuroimmunological or brain glucose metabolism aspects to explain brain pathology in schizophrenia will be presented.