P73 *Neurosciences, psychopharmacology and biological psychiatry*

CLINICAL-MORPHOPATHOLOGICAL CORRELATION IN ALZHEIMER DISEASE (AD)

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Objective: Morphopathological examination is decisive for certain diagnosis in AD (increased SP and NFT). We aimed to establish a correlation between clinical and histopathological data.

Method: Corticosubcortical biopsies were run on 19 cases between the ages of 14 and 61. Samples were taken from grey matter or other cortex zones and prepared for research by electronic microscopy, CT and MRI examinations to avoid diagnostic efrrors and select the biopsy sampling point.

Results: 6 patients between the ages of 46 and 59, 4 males and 2 females, indicated probable AD. The assessments did not establish any correspondence between severity of histopathological lesions and intensity of cognitive and non-cognitive impairment. 5 patients (aged 14 to 59, 3 males, 2 females) 2 initially diagnosed with hypophysis tumour, 3 with cerebral tumour. Histopathological examination showed modifications suprisingly similar to AD. 8 patients (aged 52/61, 6 males, 2 females) showed typical AD symptomatology by NINCDS and Reisberg criteria. Numerous discrepancies between lesion type and intensity of clinical manifestation were noticed. It was concluded that neurone impairment at the cellular body level by membrane breaking and cellular content expulsion to extracellular area is considered to be essential in the ultrastructural nature of AD.

P74 *Neurosciences, psychopharmacology and biological psychiatry*

GENETIC EPIDEMIOLOGY OF SCHIZOPHRENIA

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One obstacle for further genetic analysis of polygenous mental diseases is the absence of biologically significant criteria for dividing phenotype dispersion into distinctly differing population groups. This study is attempting to present and substantiate such criteria based on the results of a study of the clinical population of schizophrenics. 1) Defective damage takes place at its more active stage and eventually stablizes (outcome). 2) Distinct cohorts of patients are revealed in the population distinguished by the outcome level of the defect. The absolute values of the epidemiological borders of the cohorts formed a periodical series 2.5-6-16-40-100 per 10,000 population. In other words the preceding one was 40% of the following one. This regularity allowed the analysis of numerous clinical-epidemiological, geneological, genetico-epidemiological and twins data from various CND For example, if one parent is ill, the risk for children can be up to 16%. If both parents are afflicted the risk is 40%. The proband's vulnerability to illness of a sibling is 16%, half-sibling 6%. In MZ the concordance is 2.5 times higher than DZ twins.

P75 *Neurosciences, psychopharmacology and biological psychiatry*

LIPID PEROXIDATION OF SCHIZOPHRENICS IN INSULIN TREATMENT

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The lipid peroxidation indices of 55 patients suffering from paranoid schizophrenia were studied during manifest attack and following therapeutic dynamics using insulin therapy. The intensity of lipid peroxidation was estimated according to MDA level, antioxidant protection was studied as to the activity of catalaza and general antioxidant activity (AOA). An acute form of psychosis was additionally estimated according to the BPRS scale. The dependence of MDA and AOA levels on the type of schizophrenia course and severity of psychoses was stated (MDA in continuous schizophrenia was 210% from control, 144% in paroxysm, 270% or more than 65 marks in severe psychosis (BPRS scale), 139% or more than 48 marks in psychosis (BPRS). A direct correlation was found between the severity of productive disturbances and intensity of lipid peroxidation (MDA level). Qualitative remission in paroxysm schizophrenia was accompanied by normalization of lipid peroxidation. MDA level did not get the control meanings in preservation of productive or psychic disturbances. Insulin therapy led to a visible and positive effect on AOA indices, but patients with marked deterioration had cachexia of AOA after treatment too.

P76 *Neurosciences, psychopharmacology and biological psychiatry*

TREATMENT OF MODERATE AND SEVERE DEPRESSIONS WITH PROSAC

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Clinical examination and EEG Brain Mapping were performed in 18 patients and 25 healthy people as a control group between the ages of 18 and 42. Prosak was prescribed at 40mg per day for moderate depression and 60mg per day for severe ones. Psychosomatic status was checked on the 10th, 20th and 40th days from the beginning of treatment. EEG Brain Mapping (periodimetrical and dipole analysis) was used before treatment and on the 20th day. A significant decrease in symptoms was demonstrated by the end of the 3rd week. By the 40th day of treatment an excellent state was achieved in 44.5%, a good effect in 22.2% and a satisfactory effect in 22.2% with an unsatisfactory effect in 11.1%. Prosac proved to be more effective in treating moderate depression. The main changes of bioelectrical activity in healthy people and depressive patients took place in temporal fields. Interspherical asymmetry was the following: left upper and lower temporal fields demonstrated a decrease of alpha-index and an increase in the slow rhythms index in depressed patients. In parallel with clinical improvement, prescribing of Prosac led to B-index's increase in frontal fields and the interspherical asymmetry achieved the opposite features- an increase in the slow rhythm's index in all right side fields.

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