P-776 - PROTEIN BIOMARKERS IN PSYCHOTIC PATIENTS

V.Mantua, L.Giusti, G.Orsolini, T.Ventroni, M.Mauri, A.Lucacchini

Dipartimento di Psichiatria, Neurobiologia, Farmacologia e Biotecnologie, University of Pisa, Pisa, Italy

Introduction: Psychotic disorders such as schizophrenia and bipolar disorder are complex neuropsychiatric conditions of multifactorial etiology whose diagnosis is currently based solely on clinical interview methodology. Therefore, biomarkers which could improve the current classification and in perspective stratify patients on a biological basis into more homogeneous clinically distinct subgroups, are highly needed.

Objectives: We describe here the preliminary data on the application of a protein profiling investigation for the identification of peripheral markers for psychotic disorders, based on a proteomic approach.

Aims: To identify serum protein biomarkers in patients with acute phase psychotic disorder compared with anxiety or depressive disorders with no history of psychosis.

Methods: Patients were sampled and evaluated by means of SCID-I, PANSS, YMRS, HAM-A, HAM-D. Lymphocytes have been separeted and Two-Dimensional Electrophoresis (2-DE) was carried out on protein extracts. Analysis was performed using Progenesis Same Spot software.

Result: 2-DE showed significant differences in protein patterns between the two groups, in particular some protein spots are upregulated in a statistically significant manner and are under identification by mass spectrometry. PCA underlies a clear separation between the two groups, with a t1 value for the first component of 54%.

Conclusions: Preliminary analysis of a small sample shows significant differences in protein pattern between acute psychotic patients compared with non-psychotic psychiatric controls. Further work will widen the sample and will identify the single proteins.