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Abnormalities of peripheral amino acid concentrations have been reported in schizophrenia since 1954 (Sackler, 1954), however results have been inconsistent and the neurobiological implications of these abnormalities remain unclear.

We measured serum levels of serine, glycine and glutamate in 14 chronic non-refractory patients with schizophrenia treated with traditional antipsychotics and in 12 first-degree relatives and compared the data to the serum levels from 12 refractory patients treated with clozapine and their first- degree relatives.

We found decreased serum levels of serine (p=0.048) and glutamate (p<0.001) in chronic non-refractory schizophrenia compared to refractory schizophrenia, but no differences in glycine levels.

Furthermore, the data demonstrated that first-degree relatives of non-refractory patients have increased serum levels of glycine (p=0.046)and decreased levels of glutamate (p<0.001), but no differences in serine serum levels compared to first degree-relatives of refractory patients

These data show that changes in serum amino acids may predominantly involved in central glutamatergic transmission in refractory schizophrenia. Also, it could be hypothesized that this differential pattern of serum aminoacids concentrations in first-degree relatives may be a biological marker and predictor involved in the response to antipsychotic treatments in schizophrenia patients.

## P0132

Childhood subclinical characteristics in schizophrenia - a questionnaire-based retrospective study

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**Background and Aims:** Childhood subclinical characteristics have not been fully investigated in patients with schizophrenia. To elucidate the picture of them, and to find out indicators which predict later development of schizophrenia, childhood behaviors of the adult schizophrenia subjects were investigated in a questionnaire-based retrospective study.

**Population and Methods:** schizophrenia outpatients (n=50) in his/her twenties and normal healthy subjects (n = 100) were investigated. All patients are diagnosed according to DSM-IV-TR as schizophrenia, and who presents now mainly negative symptoms after passing an acute stage. By modified use of the Child Behavior Checklist (CBCL) as a retrospective assessment questionnaire, the parents of the patients and of control subjects rated their childhood behavior.

**Results:** A discriminant analysis using all items of CBCL correctly classified 99.0% of the population. Notable in an item-level analysis was an extremely attenuated aggression in personal relations in the schizophrenia subjects. Among eight subscales of the CBCL, those of Withdrawal, Social Problems, Attention Problems and Aggressive Behavior contributed most to the accuracy of the prediction of group membership.

Conclusions: It was suggested that subclinical behavioral and psychological characteristics of schizophrenia already exist in the patients' childhood, among which lack of aggressive behaviors might be one of the core features.

## P0133

Anomalies of subjective experiences as basic phenotypes of schizophrenia spectrum disorders: A review of three emperical studies

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**Background:** Anomalous subjective experiences are thought to be intrinsic to schizophrenia and considered as constituting the phenotypic validity anchor of the schizophrenia spectrum concept.

Although neglected in modern psychiatry, due to the dominating behaviouristic approach, they nevertheless have been thoroughly investigated in continental European psychiatry, where it has been shown that their presence antedates future psychosis. Anomalous experiences of self-awareness (self-disorders) are a sub-group of subjective pathology, and has been hypothesized to constitute a core phenotype of schizophrenic spectrum disorders. Our research team has participated in the development of a self-disorder scale, EASE, based on empirical studies, clinical experience, phenomenological philosophy and existing psychopathological scales. A part of the EASE-items is overlapping the BSABS. These common psychopathological phenomena have been shown to be predictors of later development of schizophrenic psychosis. Results from three separate studies making the basis of the EASE are presented.

**Method:** Drawing on the results of our own three separate empirical studies the distribution of self-disorders in patients with schizophrenia, psychotic bipolar illness, schizotypal disorder and other mental illnesses, and relatives with no mental illness is described.

**Results:** It is shown that self-disorders are common and equally frequent in schizophrenia and schizotypal disorder, and significantly less common among patients with psychotic bipolar illness and other mental illnesses, and almost absent in the relatives without mental illness.

**Conclusion:** The results support the schizophrenia spectrum hypothesis and points to self-disorders as a phenotype of schizophrenia-spectrum disorders. Self-disorders appears to be possible predictors of schizophrenic prodromal states.

## P0134

Structural brain abnormalities in the early phase of schizophrenia

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**Background:** It is well known that schizophrenia is characterized by structural brain abnormalities with neurodevelopmental origin. These abnormalities can be detected with quantitative and structural MRI methods that have an emergent role in psychiatric disorders. In our study we used voxel-based morphometry (VBM) that is the most frequently used structural MRI method.

**Method:** We compared eight patients with first episode schizophrenia and eight, age-matched healthy subjects to detect focal tissue differences in gray and white matter, and cerebrospinal fluids between groups. High resolution T1 weighted 3D MPRAGE structural