65-120 A case of monozygotic twins discordant for atypical psychosis
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Present History: A. N., born in 1975, became ill at age 12 in 1987 and again
at age 14 in 1989 and age 19 in 1994. Remissions were so complete that
she was able to work without the aid of medication. During the first episode,
she showed a tendency to catalepsy. In the second and third episodes, she
showed psychomotor excitement and inhibition. She and her partner were
believed to be identical twins.
Genetic Analysis: Whether they were identical or fraternal twins was
determined using a highly polymorphic microsatellite marker.
Results and Conclusions: The proband and her partner were shown to be
monozygotic twins. Her partner remained in completely good health;
whereas, the proband became ill periodically. The diagnosis was atypical psychosis (Schizoaffective disorder, mixed type (F25.2 ICD-10), Periodic
Katalepsy of K. Leonhard’s classification). Although no definite conclusion
could be drawn because of the ages of the twins, we speculate that even
the same genetic makeup may lead to different psychopathological states.

65-121 Dysfunctional visual scanning strategies in schizophrenia: A trait-characteristic?
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Analyzing visual scanning behavior during the performance of the trail-making
test (TMT) we have recently shown that acute schizophrenics throughout
their whole illness course show difficulties in parallel processing of visuomotor
search and manumotor tracking, resulting in poorer TMT performance. In
the meantime these results could be replicated in an independent sample of
remitted schizophrenics suggesting that dysfunctional visual scanning
behavior might be a trait-characteristic in schizophrenics. Moreover, results
of special TMT variations designed to disentangle the various psychological
functions tapped by the TMT reveal that the performance in TMT-A relies
mainly on manumotor tracking abilities, whereas TMT-B performance is
mainly determined by the ability to shift response categories, which may
be especially impaired in schizophrenics. This points to a reduced cognitive
flexibility in schizophrenics, most probably related to dysfunctions involving
the prefrontal lobe. The present study on schizophrenics and their relatives
should add further evidence to the interpretation that these dysfunctions
reflect a trait-characteristic. Until now, 20 families with a total of 50 subjects
participated in the ongoing study. Index patients as well as their relatives
without former psychiatric history underwent careful diagnostical interview
(CIDI). Analyses of visual scanning strategies during TMT-performance to
be presented at the conference will rely on a comparison of age and sex
matched samples of schizophrenic index patients and their relatives with
and without a psychiatric diagnosis.

65-122 Cell membrane abnormalities in schizophrenia: Implications for treatment
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Several groups, including our own, have reported reduced levels of poly-
saturated fatty acids in cell membranes from schizophrenic patients. We
have investigated a large series of drug free and never medicated patients
and healthy control subjects. These patients show a significant increase in
plasma levels of triboptic acid reactive substances which is an index of
lipid peroxidation. Erythrocyte membrane fatty acid levels show specific
abnormalities in these patients. An initial open study of supplementing drug
treated schizophrenic patients with concentrated fish oil led to significant
improvement in both schizophrenic symptoms and tardive dyskinesias. A double
blind placebo controlled trial of fatty acid supplementation is in progress and
the results will be reported.

65-123 Relationship of brain stem auditory evoked potentials to symptomatology of schizophrenia
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Brain stem auditory evoked potentials "BAEP," were recorded in thirty
schizophrenic patients (15 had predominantly positive symptoms and 15
had predominantly negative symptoms) and 15 normal control subjects.
The Aim was to study the "BAEP," during passive auditory information
processing in schizophrenic patients. Correlating the results with positive
and negative schizophrenic symptoms may elucidate the role of "BAEP,"
abnormalities in explaining the symptomatology of schizophrenia.
The results showed that: Nine cases (30%) of schizophrenic patients
had abnormal "BAEP," mainly in positive schizophrenics (7 cases). None of
the control cases showed abnormal "BAEP." Auditory hallucinations
are significantly more intense those with abnormal "BAEP." Higher scores of
hallucinations subscale item of SAPS in those with abnormal BAEP, than
those with normal BAEP.
Conclusions: Schizophrenics particularly those with predominantly positi
ve symptoms may show abnormalities in "BAEP," which reflect impairment
of the very early stages of auditory information processing. Their significant
relationship to the presence and severity of auditory hallucinations may help
in explanation of their psychopathogenesis.

65-124 Familial and premorbid factors in deficit schizophrenia
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The aim of this study was to test the hypothesis that deficit (D) compared
to non-deficit (ND) schizophrenic patients had different rates of environ-
mental [obstetric complications (OC), winter-spring birth season (WSBS)],
premorbid (schizoid and schizotypal personalities) and familial factors.
Methods: 47 schizophrenic patients (DSMII-R, DSMIV) were categorized
into D and ND subtypes with the Schedule of Deficit Syndrome (SDS,
Kirkpatrick et al, 1989). Others factors were assessed using International
Personality Disorder Examination (IPDE, Loranger, 1988), Schedule for
Affective Disorders and Schizophrenia (SADS, Endicott and Spitzer, 1978)
and Lewis Scale (1988).
Results: A higher rate of schizoid personality in D than in ND (42.8% vs
19.2%; NS) but also a higher rate of schizotypal personality in ND than in D
(38.5% vs 9.5%; p < 0.05) were observed. No significant difference between
D and ND was displayed regarding environmental factors [OC (D: 52.4% vs
ND: 58.3%); WSBS (D: 52.4% vs ND: 26.9%)] and familial antecedents of
schizophrenia (D: 21.4% vs ND: 16%). However, a significant higher rate of
familial antecedents of alcoholism was observed in D (53%) than in ND
(23%; p < 0.001).
Conclusion: Schizophrenic familial and environmental factors might not
distinctly distinguish deficit and non-deficit schizophrenia, but this have to be confirmed
on larger samples.

65-125 Genetic and environmental factors in schizophrenia
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The aim of this study was to assess, in a sample of 52 schizophrenic
patients aged from 18 to 40 the relationships between putative genetic
factors (schizoid and schizotypal premorbid personality disorders = PP;
familial factors) and environmental factors (obstetric complications = OC and
birth in the first half-year). The hypothesis was schizophrenia patients with
schizoid or schizotypal PP presented less environmental factors and more
familial factors than patients without PP.
Methods: PP were assessed with an adaptation of the International
Personality Disorder Examination (Loranger, 1988). They were taken into
account only when they had preceded the first characteristic psychotic