

results, and results of cytokine-estimations in the CSF will be presented.

- [1] Müller N et al: Immunological Effects of Treatment in Schizophrenia. *Advances Biol Psychiatry* (in press).
- [2] Licinio J et al (1993) Elevated levels of Interleukin-2 in neuroleptic-free schizophrenics. *Am J Psychiatry* 150: 1408.
- [3] McAllister CG et al (1995) Increases in CSF levels of interleukin-2 in schizophrenia: effects of recurrence of psychosis and medication status. *Am J Psychiatry* 152: 1291.

PHENOMENOLOGICAL RESEARCH IN SCHIZOPHRENIA: A RESEARCH PATHWAY FOR INTEGRATIVE CONNEXIONS INTO THE BIO-PSYCHO-SOCIAL MODEL

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Current interest for cognitive sciences can be partially explained by the multiple unknowns remaining in the study of superior cerebral functions as thought, memory, language, or consciousness. Researchers today try to find from the cognitive perspective new connections between old concepts such as imagination, perception, language or reality. Although a consensus seems clearly admitted as to the neurobiological bases of such functions no evidence may be considered as definite, while entering the XXIth century, for understanding the nature of relations between mental processes and cerebral structure. At the same time, psychiatrists, particularly in schizophrenia research, have to reconcile heterogeneous data whether neurobiological, neuropsychological, psychoanalytical or sociological. In fact, in front of the mysterious puzzle of schizophrenia they actually fail, always stumbling on an epistemologic *salto mortale*, to introduce the subject's history, including schizophrenic facticity and coping with schizophrenia, as involving the person as a whole. We aim in this paper to suggest that phenomenological research brings, even today, rigorous and pragmatical non-theoretical patterns for understanding the schizophrenic experience as an integrated totality. Firstly, we have to answer some questions about phenomenological research in schizophrenia such as: -1- Although a few pioneers such as Binswanger, Blankenburg, Jaspers, Minkovski or Wyrsh followed this line of study for 80 years, why is the impact of phenomenological research still so modest? -2- Is phenomenological criticism actually relevant to the new approaches of mental illness such as cognitivism or unlinear models of causality? -3- Does phenomenology constitute a good method for conducting empirical research and does this method today promise some new pathway for tomorrow's research? We suggest that phenomenology would still not bring an anthropological philosophy to romantic psychiatrists studying single cases, but turn to a basic narrative conception of intentionality that is today lacking in psychopathology and may allow for the integration of multiple heterogeneous factors. Following this line, the analysis of what we take for granted and usually call "stories" or "connections" seems to be the major challenge for phenomenological research tomorrow.

THE RELATIONSHIP BETWEEN IMMUNOLOGICAL FUNCTION AND STRESS AMONG SCHIZOPHRENIC PATIENTS

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Objectives: We examined the immunological function in schizophrenic subjects and their relation with stress levels.

Methods: A cohort of 30 schizophrenics (8 women; ages 29.37 ± 3.29) suffering from an acute exacerbation of their disease were assessed by immunological parameters and level of stress. These level was measured by the Stress and Social Support Scale (California De-

partment of Mental Health) and the Wilcox Support Social Scale. Levels of ACTH and cortisol were also measured. Immunological values of schizophrenics were compared with the average of the population of Granada (t test). Association between stress levels and immunological function was examined by the Spearman Test.

Results: A decrease of the subpopulation of T helper cells (CD 45 R+) was found among schizophrenics. In addition, we found an increase in the proportion of IL 2 receptors and an increase in the linfocitic expression of HLA-DR. However, no significant correlation was found between stress levels and immunological function. Higher levels of social support were found among women (rs: 0.4504; p < 0.05), younger patients (rs: 0.4465; p < 0.05) and was associated with lower levels of cortisol (rs: -0.6153; p < 0.001).

Conclusion: In spite of a depressed immunological function found among schizophrenics in this study, results do not allow to conclude that this fact is mediated by stress levels.

THE EFFICACY AND SAFETY PROFILE OF A NEW ANTIPSYCHOTIC, ZIPRASIDONE

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Ziprasidone is a unique molecule with a neuropharmacological profile distinct from those of standard as well as newer antipsychotics. The high 5HT_{2A}/D₂ receptor affinity ratio of ziprasidone is now regarded as a strong indicator of antipsychotic efficacy with a marked reduction of extrapyramidal side-effects (EPS). In addition to efficacy in positive symptoms of schizophrenia, the receptor profile also suggests efficacy in negative symptoms and a therapeutic impact on mood and anxiety.

Ziprasidone efficacy and safety have been evaluated in Phase II studies in a range of doses in comparison with haloperidol and placebo. Results of these trials support the conclusion that ziprasidone is an effective antipsychotic drug, when tested in patients experiencing an acute exacerbation of schizophrenia or schizoaffective disorder. It is also well tolerated, with a low incidence of EPS and no significant adverse effects on laboratory safety tests or electrocardiogram parameters. These results offer hope that this new agent will prove to be a further advance in the management of schizophrenia. Further work is required to confirm these findings and to identify the optimal dose.

CEREBRAL BLOOD FLOW VELOCITY AND PSYCHOPATHOLOGY IN SCHIZOPHRENIA: A TRANSCRANIAL DOPPLER SONOGRAPHY STUDY

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Both increases and decreases have been described in the literature for cerebral blood flow (CBF) disturbances in schizophrenia. This study intends to test the relationship between mean blood flow velocity (V_{mean}) and psychopathology by using Transcranial Doppler Sonography (TCD) for the first time. 23 consecutive patients (11m, 12f, age 33 ± 12 y) with the diagnosis of schizophrenia (DSM-III-R, ICD-10) were assessed with PANSS (Positive and Negative Scale for Schizophrenia) and TCD first on admission after being diagnosed, and for a second time after clinical improvement. Mean blood flow velocity (V_{mean}) and pulsatility index (PI) in medial, anterior and posterior cerebral arteries (MCA, ACA, PCA) were measured. Changes lying

outside of 2 standard deviations were considered abnormal. In contrast to a group of 61 age-matched normal controls, Vmean in MCA and ACA was significantly increased in the schizophrenic group on admission ($p < 0.05$). PI was not significantly changed in any of the ultrasounded vessels. Vmean showed a significant positive correlation to the degree of positive symptomatology in PANSS ($p < 0.05$). After psychopathological improvement, a significant decrease of Vmean was found ($p < 0.05$).

First results indicate a correlation between the increased blood flow velocity found in TCD and brain SPECT results. Thus, increased Vmean in frontal brain circulation may be seen as an indication of increased perfusion (SPECT), which correlates positively with the degree of productive schizophrenic symptomatology. Further study will show if TCD may be used routinely to add to, or even substitute, SPECT or PET examinations, thus constituting an alternative method to radionuclides.

TREATMENT RESPONSE STUDIES IN SYSTEMATIC CATATONIA (LEONHARD). I. LORAZEPAM CHALLENGE

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Objectives: Our objective was to establish the treatment response pattern of the Leonhardian group of systematic catatonias in a series of double-blind, placebo-controlled cross-over drug trials. This presentation reports the effect of lorazepam challenge on systematic catatonia.

Method: 17 patients with chronic schizophrenia, who met operationalized criteria for systematic catatonia according to Leonhard (Petho & Ban, 1988), participated in the study. Lorazepam (6 mg/day) and identical-looking placebo were added consecutively for 6 weeks each to the patients' existing drug regime under double blind conditions, followed by a 2-week wash-out period. Assessment using the GAS, BPRS, HDRS, SANS, AIMS, Simpson-Angus Scale, Van Putten Akinesia Scale, Barnes Akathisia Rating Scale, Modified Rogers Scale, Bush-Francis Catatonia Rating Scale and the NOSIE was carried out at baseline and at 3 weekly intervals afterwards. Raters were blind to the patients' medication status.

Results: Addition of lorazepam did not significantly alter the clinical and motor status of patients with systematic catatonia.

Conclusions: In contracts with acute catatonic syndromes occurring in other nosological entities such as affective and reactive psychoses, lorazepam had no therapeutic effects on the Leonhardian systematic catatonia subtypes characterized by persistent psychomotor abnormalities. This finding raises the likelihood that catatonia is a clinically and pathogenetically heterogeneous clinical phenomenon.

THERAPEUTIC RESPONSE TO SULPIRIDE IN THE TREATMENT OF SCHIZOPHRENIA

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Schizophrenia is an extremely heterogeneous disorder and approximately one-third of these patients respond poorly, or not at all, to antipsychotic drugs [1]. Positive symptoms of schizophrenia are known to respond well to traditional antipsychotic drugs, whereas negative symptoms respond poorly or not at all. The atypical antipsychotic drugs, of which sulpiride is the longest established, appear to be very effective both in cases refractory to traditional antipsychotics and in cases with prominent negative symptoms. In a recent study we compared the quality of life of schizophrenic patients treated with sulpiride and chlorpromazine, which appeared to indicate a favourable

outcome for sulpiride [2]. In this exploratory longitudinal study, we compared severity of clinical features: (1) Prior to transition from traditional to sulpiride drug treatment and 2) After 52 weeks of sulpiride monotherapy. Sixty patients (M:F = 30:30) diagnosed with schizophrenia according to DSM-IV criteria were investigated. Symptoms of schizophrenia including delusions, hallucinations, positive thought disorder, inappropriate affect, flattening of affect and negative thought disorder were rated from all available casenotes using a five point scale of severity on both occasions together with Global Assessments Scale (GAS) rating. Significant improvement occurred; in the GAS ratings (mean pre-trial GAS = 56.3, mean final GAS = 61.0, t -value = 8.32, $p < 0.001$). With regard to the individual symptoms of schizophrenia, significant improvement occurred for each of the symptoms rated, using the Wilcoxon signed-ranks test. In particular both measures of negative symptoms i.e. flattened affect and negative thought disorder both showed improvement at a probability of $p < 0.0005$. These findings further underline the potential role of sulpiride in the overall improvement of schizophrenic symptomatology with particular relevance to the more treatment resistant negative symptoms and may offer advantages over conventional antipsychotics.

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ZUR MEDIKAMENTÖSEN AKUTHERAPIE BEI ERSTAUFGENOMMENEN SCHIZOPHRENEN PATIENTEN — EIN VERGLEICH ZWEIER FÜNFJAHRESPERIODEN

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1. Ziel der Studie: In den letzten Jahren konnten Leitlinien zur medikamentösen Akuttherapie von schizophrenen Psychosen entwickelt werden. Die Umsetzung dieser Richtlinien in die tatsächliche klinische Praxis wurde nur selten evaluiert. Oft fanden sich im Vergleich zu den Vorgaben kontroverse therapeutische Gegebenheiten. Mittels der durchgeführten Untersuchung wollten wir nun die tatsächlich angewandten Behandlungsprinzipien prüfen. Ziel der Studie war es ebenfalls, die Praktikabilität der dort gegebenen Empfehlungen in der klinischen Praxis nachzuvollziehen.

2. Methodik: Es handelt sich um eine retrospektive Studie, kombiniert mit kurzzeitiger prospektiver Verlaufsbeobachtung. Eingeschlossen wurden stationäre Erstaufnahmen von schizophrenen Psychosen der Diagnosegruppen 295 (ICD 9, 1975). Insgesamt kamen in dieser Zeit 270 Patienten zur stationären Erstaufnahme. Die tatsächlichen medikamentösen Verhältnisse wurden mit einem strukturierten Untersuchungsbogen erfasst. Zur Auswertung gelangten eine Reihe von Einzeldaten, die einen Überblick über das medikamentöse Regime ermöglichten. Weiterhin wurden die Jahrgänge von 1985 bis 1989 mit denen von 1990 bis 1994 verglichen.

3. Zusammenfassung einiger Resultate: Derzeit können nur vorläufige Fakten berichtet werden. Vom 1985 bis 1989 wurden 120 Patienten aufgenommen, in der nachfolgenden Untersuchungsperiode 150. Das Durchschnittsalter betrug 33 Jahre, Frauen waren aber zum Aufnahmezeitpunkt 5 Jahre älter. Es liess sich zeigen, dass die grundlegenden Behandlungsprinzipien wie Beginn der medikamentösen Therapie meist am Aufnahmetag, Bevorzugung der oralen Applikation, Überwiegen von Kombinations- gegenüber Monotherapien, Neigung zu einem Beibehalten oder Verringern der initial verordneten Medikamentendosen, Aufteilen der Tagesdosen und Verordnung von Schlafmedikation, in den meisten Jahrgängen vergleichbar waren. Dem gegenüber fanden sich einige Aspekte der medikamentösen Behandlung, die auch in vergleichbaren Studien berichtet wurden. So