

### COMPARISON OF REGIONAL CEREBRAL BLOOD FLOW IN PATIENTS WITH MAJOR DEPRESSION BEFORE AND AFTER TREATMENT USING HMPAO SPECT

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The aim of the study was to compare regional cerebral blood flow (rCBF) in patients with major depression before treatment and after recovery. Twenty patients who met the DSM-IV criteria for major depressive episode were included in the study. Participation in the study required a minimum score of 18 points on the 17-item Hamilton Depression Rating Scale. The patients were studied using HMPAO with 740 Mbq pertechnetate 99mTc. Data acquisition were carried using a single head rotating gamma camera equipped with the high resolution collimator. Regional tracer uptake was measured by a semi-quantitative method on three brain slices reoriented according to the orbito-meatal (OM) line. Each patient underwent the SPECT study twice - before treatment and after recovery. The statistical significance was analysed using the pair t-Student test.

After successful treatment, a significant improvement of tracer uptake in comparison to status during depressive episode was found. The improvement of rCBF was observed in almost all regions except right occipital region and left frontal region at level OM + 3.5 cm.

The influence of the age of the patients as well as the course of illness on rCBF will be discussed.

In conclusion, regional cerebral blood flow during major depression was markedly reduced and it improved during remission.

### QUALITY OF LIFE OF SCHIZOPHRENIC PATIENTS UNDER WORK-RELATED REHABILITATION

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Quality of life (QOL) under rehabilitation has been rarely studied in psychiatry. In a cross-sectional study in 60 chronic schizophrenic outpatients (mean age 36.3 ± 11.1, 52% female) we investigated the effect of a work-oriented rehabilitation programme on the patients' QOL in comparison to a control group of patients with the same diagnosis, but without rehabilitation (waiting list). Patients of the rehabilitation group had been attending the programme for a median duration of 8.5 months. The programme focuses on occupational and everyday skills and also involves social aspects (team work etc.). The patients' QOL was assessed using two self-administered questionnaires: the Munich List of Life Dimensions (MLDL, Heinisch et al. 1991) and the Everyday Life Questionnaire (Bullinger et al. 1993), the former measuring life satisfaction, the latter functional QOL. In addition, the patients' life satisfaction (MLDL) was assessed independently by the social workers in charge.

**Main results:** 1) Both life satisfaction and functional QOL was increased in the rehabilitation group in the majority of domains assessed. Increase was highest for satisfaction with work, followed by leisure time activities, independence and friendships/acquaintances. Results indicate that the rehabilitation programme acts like a 'lever' which applied to one point (work, day structuring) subsequently affects most domains of daily living. 2) There were remarkable discrepancies between self-assessment and third-party assessment of life satisfaction, correlations being moderate for the assessments of various 'concrete' domains of life, such as social relations or leisure, but very low for the more 'abstract' items of physical and psychological well-being. Results will be discussed.

### SEVENTEEN MONTHS OF POST-MARKETING SURVEILLANCE (PMS) ON TIAPRIDE ON 6792 PATIENTS

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6792 patients treated with Tiapride, a benzamide and D<sub>2</sub>-blocking agent, were documented starting in October 1993 through to February 1995 by office-based neurologists, psychiatrists, internists and general practitioners in Germany. The scope of the PMS was to collect data on the safety and tolerance profile of tiapride. 3819 female and 2902 male patients were included (missing data of sex in 71 patients). Among these 2/3 were under and 1/3 over 75 years old. Tiapride was used for the treatment of extrapyramidal affection (36%), impaired coordination (30%) and in 11% of all cases it was administered for the treatment of side-effects due to neuroleptics and anti-parkinson drugs. Alcohol withdrawal symptoms were treated with tiapride in 4.5% and psychomotor agitation in 7.5% of all cases. Most patients (95%) had received tiapride for the first time. Only 137 adverse reactions were registered in 97 patients. 1.4% of all patients reported the following adverse events in decreasing order of frequency: fatigue, dizziness and agitation. The adverse event profile reflects the pharmacological properties of tiapride and is consistent with the cumulative international experience of the drug.

### BRAIN-MORPHOLOGIC CHANGES IN THE COURSE OF SCHIZOPHRENIA

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The reproducibility of morphometric measures within the same individual is a key feature to successful application of MRI technology to clinical medicine as well as to scientific research, and in particular to prospective studies evaluating the progression of brain volume loss. In view of the almost complete lack of such studies on even basic normative data, we have carried out a study with 53 healthy subjects and 13 monozygotic healthy pairs, all of whom were imaged twice at an interval of 14 days. Parallel to the MRI assessments EEG recordings were carried out at approximately the same points in time. The results of this normative study have not only provided data on the inter-individual scattering of morphometric and EEG measures in the general population, they have also enabled us to distinguish between "natural" fluctuations and "significant" changes in prospective studies with repeated assessments of the same individual. Based on the findings of a recent study of monozygotic twins discordant (N = 27) and concordant (N = 13) for schizophrenia, where evidence of non-genetic anatomical changes in the brain was present in almost every twin with schizophrenia, we have started a prospective study of 24 schizophrenic patients with repeated assessments at half-year intervals, in order to investigate the time development of brain-morphologic and electroencephalographic abnormalities over a 4-year period in young schizophrenic patients, likely to show a severe, more chronic course of illness.

### IMAGING OF DOPAMINE-2 RECEPTORS WITH IBZM-SPECT IN PSYCHOTIC PATIENTS TREATED WITH TYPICAL AND ATYPICAL NEUROLEPTICS

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Twenty-nine patients with a diagnosis of schizophrenia or other psy-