sary for effective relapse prevention. Therefore, we started a study in 60 outpatients treated with CLOZ for at least one year. For determination of CLOZ and its major metabolites desmethyl. CLOZ and CLOZ-n-oxid, we used reversed phase chromatography (HPLC) and UV detection (254 nm) with imipramine as an internal standard (Weigmann and Hiemke, 1992).

A preliminary analysis of 25 patients who were treated with oral dosage between 75 and 600 mg revealed a plasma level of CLOZ at (mean ± SD) 176 ± 216 ng/ml (range 34–1038 ng/ml), desmethyl-CLOZ at 103 ± 109 ng/ml and CLOZ-n-oxide at 24.1 ± 18 ng/ml.

Separate analysis of smokers (n = 16) and nonsmokers (n = 9) suggests a relevant influence of smoking on CLOZ plasma concentration and metabolism. Mean CLOZ plasma levels were significantly lower in smokers (94 ng/ml, S.D. 68.7) than in nonsmokers (313.9 ng/ml, S.D. 125, $p < 0.01$). On the other hand, the desmethyl CLOZ/CLOZ ratio as well as the CLOZ-n-oxide/CLOZ ratio was significantly higher in smokers.

The prospective determination of CLOZ and its metabolites in patients treated for relapse prevention might be useful in order to identify (a) patients with extremely high plasma levels where the dosage can be markedly reduced; (b) fast metabolizers and/or patients who are noncompliant; (c) to evaluate the dosage necessary for relapse prevention by correlating plasma level with intraindividual relapse rates.

CLINICAL HETEROGENEITY OF DSM-IV SCHIZOPHRENIC DISORDERS

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We studied the five subcriteria of the DSM-IV diagnostic criterion A for schizophrenic disorders in a sample of 94 patients with a definite diagnosis of schizophrenia. 91 patients satisfied the first subcriterion (delusions), 62 the second (hallucinations), 22 the third (disorganized speech), 21 the fourth (grossly disorganized or catatonic behavior) and 56 the fifth (negative symptoms). From the 28 logically possible subcriteria combinations for the satisfaction of criterion A, 17 were actualized in our sample. The most frequent occurrences of combinations were those of A_1 and A_2 (25 cases), A_1 and A_5 (13 cases), A_1, A_2 and A_5 (11 cases) and A_1, A_2 and A_3 (7 cases). A cluster analysis resulted in four clusters of patients: the first (30 cases) was characterized by subcriteria A_1, A_2 and A_5, the second (29 cases) by A_1 and A_2, the third (27 cases) by A_1 and A_5 and the fourth (8 cases) by subcriteria A_1, A_2 and A_3. Our findings suggest that with the sole exception of delusions, the class of schizophrenic patients according to DSM-IV remains to a large extent heterogeneous with respect to the clinical attributes covered by the subcriteria of criterion A.

D2 DOPAMINE RECEPTOR OCCUPANCY (IBZM-SPECT) AND EXTRAPYRAMIDAL SYMPTOMS UNDER TREATMENT WITH RISPERIDONE

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We performed IBZM-SPECT in eighteen schizophrenic inpatients (DSM III R) (age range from 20 to 62 years) with a predominant negative score on the Positive and negative symptom scale (PANSS). All patients received a neuroleptic monotherapy with risperidone for at least four weeks. The mean daily dose was ranging from 0.029 to 0.128 mg/kg body weight. Plasma levels of risperidone and prolactin were also measured. PANSS-ratings were carried out on the day of SPECT examination. In addition extrapyramidal symptoms (EPMS) were assessed with the extrapyramidal symptom rating scale (ESRS). I-123 IBZM-SPECT was performed 2 hr after injection of 185 Mbq IBZM (3-iodo-6-methoxybenzamide, Cygne BV). For data acquisition a rotating three-head gamma camera (Picker Prism 3000, matrix 128×128, high-resolution fan beam collimator, filtered back projection) was used. The striatum/frontal cortex ratio of tracer binding (S/FC) was reduced in all patients treated with risperidone (S/FC = 1.72–1.02). The normal reference range of the S/FC ratio was > 1.8. The degree of D2 occupancy revealed an exponential dose-response relationship ($r = 0.9$, $p = 0.001$). EPMS of low degree were registered in 8 of 18 patients. They presented with S/FC ratios between 1.1 and 1.5. In our treatment group (daily dosage 2 mg to 8 mg) there was no dose relationship concerning EPMS. The established exponential dose-response relationship of D2 receptor blockade reflects that changes in receptor occupancy seem to be directly proportional to the amount of D2 receptor blockade. In comparison to previous studies [1] with haloperidol and clozapine the results under risperidone therapy showed an intermediate behaviour of the dose-response curve of the D2 occupancy.

[1] Scherer J, Tatsch K, Schwarz J, Oertel W, Kirsch CM, Albus M, Biol. Psychiat. 36 (1994) 627–629.

GENETIC-EPIDEMIOLOGY OF SCHIZOPHRENIA AND AFFECTIVE DISORDERS: A SURVEY ON A REPRESENTATIVE SAMPLE

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The degree of genetic implication in the etiopathogenesis of schizophrenia and affective disorders is still obscure. Genetic-epidemiology attitude towards this complex problem is a contribution to the knowledge of genetic etiology of psychiatric disorders. This representative sample consisted of 169 schizophrenic and 175 affective disorders patients. The selected patients group met ICD-9 and ICD-10 criteria. The family screening method with originally introduced genogram symbols was used. It was identified 10.6% of schizophrenic and 13.1% of affective disorders probands, with unilineal or bilineal hereditary burden. Psychiatric morbidity in their relatives was traced in at least three generations. In certain cases, regarding deceased relatives, data were unreliable. Therefore the term "undiagnosed psychiatric features" was proposed. In the schizophrenic probands families the prevalence for relatives at risk was as following: affective disorders (38.5%), undiagnosed psychiatric features (34.6%), schizophrenia (15.4%) and schizoaffective disorder (11.4%). In the affective disorders probands families the prevalence for relatives at risk was as following: affective disorders (41.0%), undiagnosed psychiatric features (38.5%), schizophrenia (15.3%) and schizoaffective disorder (5.2%). This representative sample survey suggests the psychiatric morbidity aggregation in the schizophrenic and affective disorders index patients families, indication elements for setting the role and mode inheritance in the etiopathogenesis and comorbidity of psychiatric illnesses.

HOW DOES SEX INFLUENCE UTILIZATION OF PSYCHIATRIC SERVICES IN VULNERABLE SCHIZOPHRENIC PATIENTS?

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Epidemiological studies of the past decades have shown that women utilize more frequently outpatient mental health services than do men, although prevalence rates concerning psychiatric illnesses do not differ significantly. Most of these studies refer to minor mental health problems. Recent studies focusing on women in long-term psychiatric care suggest that women have less intensive input from services and are not adequately served according to their needs.