chotic disorders were examined with IBZM-Spect during neuroleptic monotherapy. Six patients received haloperidol (10 mg–20 mg), 11 patients had risperidone (5 pat. 3 mg/day, 6 pat. 8 mg/day), four patients received clozapine (400–600 mg) and three patients received the novel antipsychotic seroquel. Eight non-psychiatric individuals served as controls. Comparing S/F ratios with the control group (mean 1.64, range 1.60–1.78, sd 0.08), the ratios were lowest in the haloperidol group (mean 1.09, range 1.04–1.15, sd 0.04), followed by the risperidone 8 mg group (mean 1.18, range 1.14–1.26, sd 0.04) and the rispridone 3 mg group (mean 1.25, range 1.161.36, sd 0.05), the seroquel group (mean 1.54, range 1.51–1.56, sd 0.02) and the clozapine group (mean 1.53, range 1.44–1.64, sd 0.09). Differences between the values of the haloperidol group and the other groups and the difference between the 3 mg and the 8 mg risperidone group reached statistical significance. Our results indicate a substantially lower dopamine D2 receptor occupancy by the atypical antipsychotic substances clozapine and seroquel.

PSYCHIATRIC COST-EFFECTIVENESS OF DRUG AND COGNITIVE-BEHAVIORAL THERAPY IN SCHIZOPHRENIA

D. Lecompte. *Institute of Psychiatry, Brugmann University Hospital, place A. Van Gehuchten 4, 1020 Brussels, Belgium*

The combination of pharmacotherapy and cognitive-behavioral therapy in schizophrenia is an important economic force to reduce the cost of the psychiatric care by reducing the risk of psychotic relapse.

The cognitive-behavioral profession provides a theoretical model to understand the drug-compliance problem in schizophrenia and to enhance its therapeutic approach.

The main components of this approach include continuous behavioral analysis, enhancement of therapeutic alliance, psychoeducation of the patient and significant others, perceptual and attitudinal strategies, behavioral strategies and cognitive restructuration.

The psychiatric cost-effectiveness of a group of drug non-compliant schizophrenics (N = 32), who received a cognitive-behavioral treatment, was compared with that of a control group (N = 32).

The data were adjusted for age, sex, duration of stay, level of psychopathological disturbance, duration of illness and diagnosis.

The results show differences in time involved in the psychotherapeutic approach and length of hospital stay after the index-admission.

The comparison illustrates a significant drop in the overall per patient cost of psychiatric care in the therapeutic group.

PET STUDY WITH THE BENZAMIDE TIAPRIDE

K.L. Leenders [1], E. Blauth-Eckmeyer [2]. [1] *Paul-Scherrer-Institute CH-5232 Villigen, Switzerland;* [2] *Synthelabo Arzneimittel, D-82178 Puchheim, Germany*

Introduction: In hyperkinetic disorders like Huntington's Chorea, Tics, tardive dyskinesia and others the dopaminergic neurotransmitter system in the striatum is involved. The selective dopamine-2-receptor antagonist tiapride is wellknown as a substance with a high antidyskinetic efficacy in these indications. The study aim was to determine in vivo the capability of tiapride to block dopamine-2-receptors in the striatum in various dosages through PET analysis.

Method and Material: 8 healthy volunteers entered the study. Each volunteer underwent 2 or 3 PET scans: a baseline scan without pretreatment with tiapride and another one or two after different intervals (1 hour or 5 hours) following the oral administration of tiapride in various single doses (100 mg/die or 300 mg/die or 600 mg/die). The used radioligand was ^{11}C-Raclopride, which binds, as an antagonist, selectively to dopamine-2-receptors but not to other receptors.

Result: The following dopamine-2-receptor occupancy data (in percentages) were obtained in the study:

Tiapride dosage	After 1 hour	After 5 hours
100 mg	33%	34% (putamen)
	33%	38% (caudate n.)
300 mg	73%	78% (putamen)
	70%	79% (caudate n.)
600 mg	76% (putamen)	
	77% (caudate n.)	

Conclusion: Via PET analysis it was possible to demonstrate, that tiapride is also in vivo a powerfull dopamine-2-receptor antagonist. Initial dose/occupancy relationships could be determined.

'SEROQUEL'™ (ICI 204,636) EPS AND PROLACTIN: COMPARISON WITH HALOPERIDOL

C.G.G. Link, B. Kowalcyzk, L.R. Farrow. *Zeneca Pharmaceuticals, Alderley Edge, Macclesfield, UK; Zeneca Pharmaceuticals, Wilmington, DE19850-5437*

The atypical antipsychotic clozapine has minimal extrapyramidal symptoms (EPS) liability and does not cause sustained hyperolactinaemia. These atypical features are expected to improve compliance, reduce hospitalisations and enhance the quality of life for patients with schizophrenia. 'Seroquel' (ICI 204,636) is a promising new antipsychotic with an atypical profile. In phase II clinical trials there were no differences between ICI 204,636 and placebo in EPS as assessed by the Simpson Scale total score, use of anticholinergic medication and the incidence of motor system adverse events. Further, there were no differences between the ICI 204,636 group and placebo group in changes from baseline in prolactin (PRL) levels after 6 weeks of treatment. EPS and PRL were further assessed in a phase III multicentre, double blind, randomised comparison of ICI 204,636 and haloperidol. This trial evaluated the efficacy and tolerability of ICI 204,636 and haloperidol over a 6 week period in the treatment of patients with an acute exacerbation of chronic or subchronic schizophrenia. The patients were dosed flexibly depending on clinical response and tolerance up to 800 mg ICI 204,636 daily (221 patients) or 16 mg haloperidol daily (227 patients) both administered b.d. ICI 204,636 caused less EPS as shown by a lower incidence of motor system adverse events such as akathisia, hypertonia, EPS tremor and dystonia in the ICI 204,636 group. In addition, the concomitant use of anticholinergic drugs was less common in the ICI 204,636 group (13%) as compared with the haloperidol group (49%). Finally the majority of patients treated with ICI 204,636 had either an improvement or no change in EPS, as assessed by the Simpson Scale, whereas the majority of patients treated with haloperidol experienced a worsening of EPS (except at day 7) and there were statistically significant differences ($p < 0.05$) at all time points in favour of ICI 204,636. There was a significant difference ($p = 0.0001$) in PRL due to a decrease in the ICI 204,636 compared to an increase in the haloperidol group. These results provide further support to the hypothesis that ICI 204,636 has an atypical profile.

'Seroquel' is a trademark, the property of Zeneca Limited.

PLASMA LEVELS AND METABOLISM OF CLOZAPINE IN RELAPSE PREVENTION OF SCHIZOPHRENIA

U. Henning, S. Löffler, B. Schmitz, A. Klimke. *Psychiatric Department, University of Duesseldorf, Bergische Landstr. 2, D-40605 Duesseldorf, Germany*

The atypical neuroleptic clozapine (CLOZ) is frequently used for relapse prevention in schizophrenic outpatients who developed full or partial remission under CLOZ. Unfortunately, there are no clinical studies regarding CLOZ dosage or plasma level which are neces-