= 1, undifferentiated schizophrenia N = 1). All subjects underwent at MRI and EEG examination and diagnosis was according to DSM III-R criteria. As inclusion criterion we used the presence of auditory hallucinations measured with our scale for hallucination's evaluation. The psychopathological status was assessed by SAPS, SANS, PANSS. MRI scans were performed using a 1.5 Tesla Magnetom-Siemens, IR, SE, T1, T2, DP; the regions examined were corpus callosum, temporal lobes, planum temporale, cerebellum, amygdala, hippocampus and ventricles, using axial, coronal and sagittal sections. EEGs were taken out on a 18-channel recordings with a computerized system.

The results showed the presence of more important morphological alterations in epileptic patients with schizophrenia, as compared with non epileptic schizophrenics. These alterations consist of ventricular enlargement, mainly in right hemisphere, and thickening of right insular and parietal cortex. Only in two schizophrenic patients there are alterations characterized by left hippocampal atrophy and corpus callosum atrophy. As expected, EEG showed more prominent modifications in epileptic too, compared with non epileptic schizophrenics.

Although definite conclusions cannot be drawn due to restrictal sample, it is nonetheless possible to hypothesize that hallucinatory symptomathology of the two groups is supported by a different degree of severity of morphological and neurophysiological substrates.

SUBJECTIVE RESPONSE TO ANTIPSYCHOTICS IN SCHIZOPHRENIC OUTPATIENTS: PRELIMINARY RESULTS USING A FRENCH VERSION OF THE DRUG ATTITUDE INVENTORY (DAI)

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Subjective response to neuroleptics (SR) is a critical issue in the collaboration of schizophrenic outpatients. For these patients, non-compliance rates are known to be as high as 50%. The way they feel on medication can affect durably their compliance to treatment. Hogan and Awad [1,2] reported on the development and validation of the Drug Attitude Inventory (DAI), a self rating scale to assess SR. DAI was shown to (1) allow prediction of compliance, (2) have a high rate of concordance with Neuroleptic Dysphoria Scale [3] and (3) have internal consistency, which makes it a valid and useful tool to assess SR. *Objectives:* (1) To validate the french version of DAI, (2) To explore in a naturalistic setting the factors affecting SR. *Subjects and methods:* Transversal and naturalistic study of a population of schizophrenic (ICD-10 F20.XX) outpatients treated in our clinic. Self-evaluation by the patient and evaluation by the clinician of: (1) Subjective response to neuroleptics (DAI-30), (2) Symptoms (SCL-90, BPRS), (3) Therapeutic alliance (HAq-P/HAq-T), (4) Compliance, (5) Clinical Global Impressions (CGI), (6) Global Functioning Assessment (GAF), (7) Epidemiological data. *Preliminary results:* 29 patients completed the self assessment part. 21 are perfectly compliant (compliant group), and 8 are relatively non-compliant (non-compliant group). Scores of DAI-10 (short version of DAI) are higher in the compliant group (mean diff. = 14.26, DF = 27, t = 3.35, p = 0.002). Degree of compliance is linearly correlated to DAI score ($r = 0.57$, $r^2 = 0.33$, $p = 0.0009$). Surprisingly, patients receiving clozapine (9) and other neuroleptics (20) show no difference in SR. Factor analysis yielded 3 clinically relevant factors quite similar to the original (English) scale: (I) Subjective positive and prevention, (II) Subjective negative and egosyntonic symptoms [4], (III) Health-sickness and autonomy. *Conclusion:* French version of DAI-30 seems to have a similar structure as original version. It shows concordance with the degree of compliance. Psychopharmacological factors are not the only factors implicated in SR, and are still to be identified. Limitations of our study are (1) nonhomogenous indication for treatment (patients received clozapine on second intention), (2) small rate and degree of non compliance in our sample.

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HEMISPHERIC ACTIVATION IN SCHIZOPHRENIA AND DEPRESSION MEASURED BY CONJUGATE LATERAL EYE MOVEMENT

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The lateralization of cerebral dysfunction in schizophrenia has mostly been attributed to the left hemisphere and in major depression — to the right hemisphere. In this study, we present the results of conjugate lateral eye movement (CLEM) test as a method of measuring hemispheric activation, in 33 patients with exacerbation of schizophrenia (11 male, 22 female, aged 18–48 years), in 38 patients with the acute episode of major depression (7 male, 31 female, aged 20–60 years), and in 30 control subjects (16 male, 14 female, aged 18–60 years). CLEM recordings in response to twelve verbal question of cognitive (6), emotional (4) and spatial (2) content were performed with electronystagmograph. The mean numbers of CLEM to the right (R) and to the left (L) in response to cognitive, emotional and spatial questions were as follows:

Group	Cognitive		Emotional		Spatial	
	L	R	L	R	L	R
Schizophrenia	1.4*	3.3*	0.9*#	2.5*#	0.8	0.9#
Depression	2.8#	1.7#	1.9#	1.4#	1.0	0.7
Controls	1.3	3.0	2.9	0.8	1.2	0.3

*difference between schizophrenia and depression significant, $p < 0.05$
#difference vs control subjects significant, $p < 0.05$ (Mann-Whitney test)

Our results corroborate previous reports on greater right CLEM in schizophrenia and greater left CLEM in depression, in response to both cognitive and emotional stimuli. This may imply that in schizophrenic patients, otherwise than in remaining groups, the emotional stimuli are not properly handled by the right hemisphere but are mostly processed by the left one, what may contribute to impaired emotional functioning in these patients. Similarly in depressed patients, cognitive stimuli are processed by the right hemisphere what may lower the efficiency of cognitive functions in this illness.

THE PRECLINICAL PROFILE OF THE NEW ANTIPSYCHOTIC, ZIPRASIDONE

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Ziprasidone (CP-88, 059) is a combined serotonin and dopamine receptor antagonist which exhibits potent effects in preclinical assays predictive of antipsychotic activity. While the compound is a

dopamine antagonist *in vitro* and *in vivo*, its most potent action is antagonism of $5HT_{2A}$ receptors, where its affinity is an order of magnitude greater than that observed for D_2 sites. Laboratory and clinical findings have led to a hypothesis that antagonism of $5HT_{2A}$ receptors in the brain may limit the undesirable motor side-effects associated with dopamine receptor blockade and may also improve clinical efficacy by ameliorating some of the negative or deficit symptoms of schizophrenia. *In vivo*, ziprasidone antagonizes $5HT_{2A}$ receptor-induced head twitch with six-fold higher potency than for blockade of d-amphetamine-induced hyperactivity, a measure of central D_2 receptor antagonism. The prediction of antipsychotic efficacy without severe motor side-effects is also supported by the relatively weak potency of ziprasidone to produce catalepsy in animals, contrasted with its potent antagonism of conditioned avoidance response and dopamine agonist-induced locomotor activity and stereotypy.

Ziprasidone has high affinity for the $5HT_{1A}$, $5HT_{1D}$, and $5HT_{2C}$ serotonin receptor subtypes. It also inhibits serotonin and norepinephrine uptake. These actions may further enhance its therapeutic potential.

In human volunteer positron emission tomography (PET) studies, ziprasidone inhibits ^{11}C raclopride binding. Pharmacokinetic and pharmacodynamic studies indicate that a twice daily dosage regimen is appropriate.

QUALITY OF LIFE IN FIRST EPISODE SCHIZOPHRENIA

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Objectives: To evaluate the quality of life of individuals presenting to a catchment area psychiatric service and a private psychiatric hospital with a first episode of schizophrenia or schizophreniform psychosis.

Method: Thirty four patients (26 male, 8 female) who presented to the above services with a SCID diagnosis of first episode of schizophrenia (n = 22) or schizophreniform psychosis (n = 12) were assessed using the Positive and Negative Syndrome Scale (PANSS), the Global Assessment of Functioning scale (GAF) and the Quality of Life Scale (QLS). The relationship between variables was assessed using Spearman Correlation Coefficients and differences between groups using the Mann Whitney U test.

Results: These individuals had a mean total QLS score of 62 (SD $\pm$ 22.7) indicating that, prior to psychiatric treatment, they had a quality of life in the moderate range. Quality of life was correlated with the GAF score ($p = 0.02$) and the total PANSS score ($p = 0.02$) but independent of age ($p = 0.14$). Quality of life was independent of the Negative Syndrome score on the PANSS ($p = 0.18$).

Individuals with schizophrenia had a poorer quality of life compared to individuals with schizophreniform psychosis ($p < 0.01$) but there were no significant differences between the groups in the GAF ($p = 0.78$) and total PANSS ($p = 0.20$) scores.

Conclusions: Individuals presenting with a first episode of schizophrenia or schizophreniform psychosis have a diminished quality of life. Their quality of life is influenced by the severity of psychopathology and possibly by the length of untreated illness.

SYMPTOMATOLOGY AND LEVEL OF FUNCTIONING IN FIRST EPISODE PSYCHOSIS

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Objectives: To evaluate the diagnosis, symptomatology and level of functioning of patients presenting with a first episode of psychosis to a catchment area service and a private psychiatric hospital.

Method: All patients presenting with a first episode of psychosis were assessed using the SCID-P, the Positive and Negative Syndrome Scale (PANSS) and the Global Assessment of Functioning scale (GAF). The relationship between variables was assessed using Spearman Correlation Co-efficients and differences between groups using the Mann-Whitney U test.

Results: Sixty-three patients (36 male, 27 female) ranging in age from 13 to 65 years (Mean $\pm$ SD = 28.8 $\pm$ 11.4) were included in the study. The most common diagnosis was schizophrenia (n = 23) and schizophreniform psychosis (n = 14).

The mean total PANSS score was 85.2 (SD $\pm$ 21.4) and was strongly correlated with the GAF score ($p < 0.001$) but independent of age ($p = 0.19$). Males had a significantly lower GAF score compared to females ($p = 0.02$) but there was no gender difference in the total PANSS score ($p = 0.23$).

Twenty five patients (40%) had a lifetime prevalence of drug abuse or dependence but only 12 patients (19%) had signs of drug abuse or dependence in the month prior to presentation.

Conclusions: Level of functioning was strongly influenced by the severity of psychopathology. Substance abuse is common in individuals presenting with a first episode of psychosis.

THE EFFECT OF PSYCHOSOCIAL REHABILITATION ON QUALITY OF LIFE AND SYMPTOMATOLOGY IN SCHIZOPHRENIA

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Objectives: This study assessed the impact of a 16 week outpatient intensive psychosocial and educative rehabilitation programme on the quality of life and symptomatology of persons with schizophrenia.

Method: Twenty nine individuals with DSM-III-R schizophrenia (mean age 35 $\pm$ 12 years) were independently assessed using the Quality of Life scale (QLS) and Scales for Assessment of Negative (SANS) and Positive Symptoms (SAPS). Nineteen individuals underwent a 16 week intensive psychosocial and educative programme. Ten individuals continued conventional rehabilitation. Both groups were reassessed using the same scales at week 17.

Results: At baseline the two groups did not differ in terms of total QLS, summary SANS or SAPS scores. Neither did the two groups differ at completion in summary SANS or SAPS scores. However, there was a 46% improvement in the mean total QLS score (from 49 $\pm$ 16 to 72 $\pm$ 17, $p < 0.001$) for those who underwent the intensive programme but no change for those with conventional rehabilitation.

Conclusions: This study highlights the 'quality of life' benefits of psychosocial and educative rehabilitation for individuals with schizophrenia.

THE EFFICACY OF SULPIRIDE IN THE TREATMENT OF NEGATIVE FORMS OF SCHIZOPHRENIA

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Sulpiride is a substituted benzamide which has been used for years in the treatment of psychotic disorders as well as depression. Given in low doses, it acts as a presynaptic blocker therefore increasing dopaminergic transmission. This mechanism is presumed to be active in the improvement of negative symptoms in schizophrenia. In our study, 19 female inpatients who presented the clinical picture of negative form of schizophrenia were included. They all met the DSMIII R criteria for schizophrenia, and were previously intolerant to clozapine, or were simply admitted for the first time for exhibiting the nonpro-

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