

of the negative spectrum followed by positive and general behavioral ones. Concerning schizophrenia the symptoms can be considered as negative symptoms and the accessory symptoms consequently as positive symptoms (Bleuler, 1924). Pathological psychology deals with disturbed expression of normal mental functions, and "hedonia" is one of the most fundamental attributes of a man as a social creature. Anhedonia is the first negative of vital brain properties. Deficits in social functioning are key characteristics of schizophrenia as defined by DSM IV. Such deficits are associated with poor prognosis and low quality of life. Thus, patients with predominant negative symptoms are among the most socially impaired people with mental illness.

#### GRAPHIC REPRESENTATION OF PSYCHIATRIC INPATIENT MEDICATION

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Psychiatrists managing inpatients usually rely on treatment sheet prescriptions and data to monitor and review medication. It is relatively easy to recall and visualize the medication given when the patient has been in hospital only a short time and the number of medications prescribed are few. It is much more difficult and time consuming to review and visualize the medication given when the patient has been in hospital for a longer period and when the number of medications is large and when there have been a number of changes to medication and dosage. A particular method of graphic representation of the medication given to the patient has been developed to overcome these difficulties. The spreadsheet and graphing capabilities of an available commercial computer program were used and in practice the graphs are produced when needed to assist with management review. Examples of the graphs are provided to demonstrate the advantages.

#### DESCRIPTION OF A SAMPLE AT HIGH RISK FOR SCHIZOPHRENIA AND CONTROLS

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**Background.** This sample and the data presented form an interim report of a large ongoing prospective family study being conducted in Edinburgh and funded by the MRC.

**Recruitment details** 70 subjects (mean age = 22.1, sd 2.6; 48% male) who had at least 2 relatives with schizophrenia (one first degree and at least one other) were recruited and compared with 25 normal controls (mean age 21.8, sd 2.4; 52% male). Of the subjects 7 were recruited from High Density families, 33 had a parent with schizophrenia and one other affected relative; 50 had a first degree relative with schizophrenia and another affected relative. No first or second degree relatives of controls suffered from psychotic illnesses. An attempt was made to match for paternal social class.

**Methodology** Both subjects and controls were interviewed for general background details including: educational attainment, employment status, alcohol use, drug use, early language development, and forensic history. They also completed the SADS-L, RISC (Rust Inventory of Schizotypal Cognition's), and the SIS (Schizotypy Interview Schedule).

Neuropsychological parameters were assessed using the WAIS-R, Word Fluency, Semantic Fluency, Stroop test, and the Hayling Sentence Completion test. The WAIS-R results were correlated with educational attainment and social class.

**Results** The SADS-L revealed that 36% of the subject group compared with 2% of the controls ( $p = 0.01$ ) had a history of psychiatric events (for example childhood psychiatric contact, major depression and anxiety disorder). There was a trend towards an increased incidence of forensic history and juvenile delinquency in the subject

group. The subject group demonstrated a significantly reduced full scale I.Q when compared to the control group (mean = 98.81, sd 13.60 versus mean 106.69, sd 15.18;  $p = 0.02$ ). The full scale I.Q correlated with educational age ( $r = 0.53$ ;  $p = 0.09$ ) and educational attainment ( $r = 0.44$ ;  $p = 0.03$ ) in the control group but only with educational age ( $r = 0.28$ ;  $p = 0.02$ ) and not educational attainment ( $r = 0.06$ ;  $p = 0.64$ ), suggesting that the subject group may fall short of achieving their educational attainment.

#### AMYGDALOTOMY FOR UNCONTROLLABLE RAGES (CASE REPORT ON PERSON WITH SCHIZOPHRENIA)

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A 32 year man, with history of Chronic Paranoid Schizophrenia was socially disabled by uncontrollable violent behaviour, leading to multiple admissions to psychiatric hospitals and prison sentences, for inappropriate violence. He had received prolonged courses of Anti-psychotic Medication and Electro-convulsive Therapy without any apparent benefit. As a last resort, he consented to a neurosurgical procedure, to obtain relief from his condition. Mental Health Commissioners under Section 57 Mental Health Act ratified this procedure.

Operation on 23.10.88 of Bilateral Medial Amygdalotomy was carried out by Professor Hitchcock in Birmingham. This identification and localization of Amygdala by computerized tomography with contrast material in ventricles. The patient tolerated the procedure well, his aggression was controllable and behaviour showed great improvement, post operatively he settled well in the community, needing a reduced doze of anti-psychotic medication. He was followed up by Dr. Paul Bridges from Guys Hospital and at Kent & Canterbury Hospital till on 24.5 94, aged 49 yrs, he expired due to myocardial infarction associated with coronary artery atheroma.

Multi-disciplinary Studies reported in literature show that for schizophrenics with uncontrollable behaviour, bilateral stereotectic amygdalotomy is beneficial for some selected patients.

#### THE RELATIONSHIP BETWEEN DEPRESSION AND NEGATIVE SYMPTOMS IN SCHIZOPHRENIA: COMPARISON OF CLINICAL ASSESSMENT AND THE DEXAMETHASONE SUPPRESSION TEST

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**Background** Dexamethasone non-suppression has been a significant finding in schizophrenia. Some studies have attributed this to depression in schizophrenia whilst others report that negative symptoms are associated with hypercortisolaemia. These studies have been limited by small sample size, inadequate operational criteria and failure to measure both depression and negative symptoms. **Objectives.** To examine the effect of depression and negative symptoms on the dexamethasone suppression test in patients with schizophrenia. **Method** Sixty-four patients fulfilling DSM IV criteria for schizophrenia were randomly selected. Patients with alcohol and drug misuse, significant medical condition, in-patient status less than one week, and age over 65 were excluded. Patients were screened for depression as defined by DSM IV criteria. All patients were rated on 1. Brief Psychiatric Rating Scale (BPRS), 2. Scale for Assessment of Negative Symptoms (SANS) 3. Hamilton Rating Scale for Depression (HRSD). Past history of a suicide attempt was also recorded as being present or absent. The 1 mg dexamethasone suppression test was administered at 10 pm and cortisol and dexamethasone levels were measured at 4 pm the next day. **Results** 64 patients were recruited: 52 males and 12 females (mean age 37.5 years SD  $\pm$  10). Twenty-three patients fulfilled DSM IV criteria for major depression (34%) of whom 7 were borderline; 28 patients had a history of parasuicide (44%). Three patients

were dexamethasone non-suppressors of whom two were depressed and one borderline. Suppressors and non-suppressors differed significantly in their BPRS ( $p < 0.04$ ) and HRSD ( $p < 0.03$ ) but not in their SANS scores. The BPRS, HRSD and the SANS scores were significantly different in those with and without a history of attempting suicide. **Conclusions** These findings confirm high rates of depression and parasuicide in schizophrenia. It failed to replicate the high rates of dexamethasone non-suppression in other studies. Furthermore, dexamethasone non-suppression was associated with depression and not with negative symptoms. These data do not support the hypothesis that hypercortisolaemia in schizophrenia may be related to the cognitive decline associated with negative symptoms. The findings also emphasise the importance of distinguishing between negative symptoms and depression in schizophrenia and that when these two behaviours are separated out, dexamethasone non-suppression is a marker for affective, rather than core schizophrenic symptoms.

### P3a OF EVENT-RELATED POTENTIALS IN METHAMPHETAMINE PSYCHOSIS

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Methamphetamine (MAP), which is chemically closely related to amphetamine (AP), has central effects more pronounced than AP. In the early 1970s, a second epidemic of widespread MAP abuse developed in Japan. Some researchers have noted that MAP use may result in psychotic symptoms persisting for more than several months. In addition, Sato et al. reported that patients with MAP psychosis show a marked tendency to recur even after long-term abstinence. These clinical features of MAP psychosis suggest that some biological changes occur in the central nervous system in MAP psychosis. In this study, to examine impairment of information processing in MAP psychosis, auditory event-related potentials were recorded, using an oddball task and an ignore task similar to those by Squires et al. Fifteen MAP psychotics (12 men and 3 women, mean age 32.7 years) and 15 normal volunteers (12 men and 3 women, mean age 32.7 years), who each provided informed consent, were included in the present study. MAP psychotics, meeting DSM-III-R criteria for amphetamine or similarly acting sympathomimetic amines, were in the residual state following remission of acute psychotic symptoms. Those patients meeting the DSM-III-R criteria for schizophrenia, major mood disorders, and other substance use disorders were excluded. In the oddball task, subjects were required to press a button in response to rare target tones (1500 Hz) embedded randomly in a series of frequent tones (1000 Hz). In the ignore task, subjects were required to ignore stimuli. The scalp EEG was recorded from midline Fz, Cz, and Pz referred to linked earlobes. EEGs were sampled every 2.5 msec from 40 msec before to 600 msec after the stimulus onset. The P300 area was measured in both conditions. MAP psychotics showed a normal P300 area in the oddball task, but they showed reduced a P300 area (P3a area) in the ignore task. These results suggested central noradrenergic dysfunction in MAP psychosis.

### REVIEW OF THE RELATIONSHIP BETWEEN USE OF PSYCHOACTIVE SUBSTANCES AND PSYCHOTIC DISORDERS. STUDY OF ONE CASE

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**Objective:** Bibliographic review of the possible relation between the consumption and abuse of psychoactive substances (alcohol, stimu-

lants, cannabis, hallucinogens and narcotics) and the establishment and/or maintenance of psychotic disorders in a patient with personality disorders.

Case study of a male with a history of two admissions to psychiatric units with psychotic episodes characterised by hallucinations and delusions related to environmental circumstances and the recent consumption of drugs of abuse.

### PSYCHOSIS AND HYPNOTIC CONSUMPTION

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The aim of this study was to evaluate hypnotic prescription among inpatients suffering from schizophrenic and schizoaffective disorders in an adult Psychiatric Department of a French University Hospital.

**Method.** We analyzed the data on hypnotic prescription and psychiatric diagnosis (ICD-10), supplied by our computer system for the year 1994. We divided hypnotics in 3 pharmacological groups: benzodiazepines, new drugs (zolpidem, zopiclone) and others (phenothiazines, associations etc).

**Results.** The total number of admittances for psychosis in 1994 was 673. Hypnotics were used in 54 admittances. Benzodiazepines accounted for 51.8% of all hypnotics, followed by new drugs (29.6%) and others (18.5%). Percentage of hypnotic prescription in schizophrenic and other psychotic disorders was as followed: paranoid schizophrenia 4.5%; hebephrenic schizophrenia 9.7%; catatonic schizophrenia 0%; undifferentiated schizophrenia 6.4%; residual schizophrenia 6%; simple schizophrenia 0.8%; schizoaffective disorder manic type 2.7%; schizoaffective disorder depressive type 25%; non schizophrenic psychosis 13.6%.

**Conclusion.** Only 8% of our inpatients suffering from psychosis were treated with hypnotic drugs. Benzodiazepines were the most widely prescribed group. Hypnotic prescription was usually associated with schizoaffective disorder depressive type, non schizophrenic psychosis and hebephrenic schizophrenia. Sleeping pills were unfrequently used in other cases, unless sedative neuroleptics were prescribed.

### CLOZAPINE EFFICIENCY AND WEIGHT GAIN

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The aim of this study was to evaluate weight gain during clozapine treatment and determine possible relationship between psychiatric improvement and weight gain.

Fifteen treatment-resistant schizophrenic inpatients were assessed by rating scales (BPRS, PANSS) for 21 months. Body weight was evaluated before inclusion and at each subsequent psychiatric assessment after the beginning of clozapine treatment.

In a first period, all patients presented with a significant improvement in total BPRS and other rating scales, reaching at 10 months a 58% decrease from initial value of BPRS. But in a second period, we clearly identified two patterns of evolution: in group 1, where patients experienced a marked improvement in symptoms of schizophrenia followed by subsequent stability, a regular weight gain was observed; in contrast, no significant weight profile was noted in group 2, where patients, after initial response for 10 months, experienced clinical instability which required higher doses of clozapine.

These results can be considered as an argument in favor of a common substratum to the clinically observed correlation between long-term antipsychotic efficiency of clozapine and weight gain.