

increased ( $p = 0.003$ ) and amplitude was decreased ( $p = 0.001$ ) compared to controls. 4. In non-familial schizophrenics, there was no significant prolongation of P300 latency. P300 amplitude was decreased but this was not statistically significant. These findings point out to P300 latency prolongation as a trait marker for familial schizophrenia that could help clarify the endophenotypic status of non-affected members in genetic studies.

#### ABNORMAL INVOLUNTARY MOVEMENTS IN SCHIZOPHRENIA; PREVALENCE IN TREATED AND FIRST EPISODE SAMPLES

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**Aims.** To establish the prevalence of tardive dyskinesia in a sample of patients with schizophrenia attending our catchment area rehabilitation centre and to establish a baseline rate of spontaneous involuntary movements in first episode schizophrenia in the same catchment area.

**Method.** Sixty patients (28 M, 32 F) with DSM-III-R schizophrenia were randomly selected and assessed for dyskinetic movements using the Abnormal Involuntary Movements Scale (AIMS). Patients were also assessed for their level of positive and negative symptoms using the Scale for Assessment of Positive and Negative Symptoms respectively (SANS & SAPS), by a second investigator, blind to the AIMS score. Forty-five patients (28 M, 17 F) presenting over a 2 year period with first episode DSM-III-R schizophrenia were also assessed for dyskinetic movements at presentation using the AIMS scale. Tardive dyskinesia and spontaneous involuntary movements were diagnosed in both samples according to the research diagnostic criteria of Schooler and Kane.

**Results.** The day patient sample had a mean age of 36.6 years (s.d. 12.4 years). Fifteen patients satisfied Schooler and Kane criteria for tardive dyskinesia (prevalence rate 25%). Those with tardive dyskinesia did not differ in terms of gender, positive symptoms or current neuroleptic dose but were significantly older ( $p = 0.02$ ) and had more negative symptoms ( $p = 0.02$ ). The sample of 45 patients with first episode schizophrenia had a mean age of 27.8 years (s.d. 9.5 years). Two patients satisfied Schooler and Kane criteria for spontaneous involuntary movements (prevalence rate 4.4%).

**Conclusions.** Tardive dyskinesia occurs in a significant proportion of patients with schizophrenia during the course of their illness (25%). In this sample dyskinetic patients were older and had more negative symptoms. Spontaneous involuntary movements exist in a small proportion of patients with schizophrenia at first presentation prior to treatment with neuroleptics. We suggest that the majority of patients with schizophrenia who develop abnormal involuntary movements do so during the course of their illness and treatment.

#### HUMAN DOPAMINE D4 GENE EXPRESSION USING THE RIBONUCLEASE PROTECTION ASSAY

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The recent cloning and characterisation of multiple dopamine receptors, has revitalised the dopamine hypothesis of Schizophrenia, and has provided an opportunity to examine the mechanisms regulating their function in normal and disease state. The regional distribution and level of expression of dopamine receptor subtype mRNA is a potential mechanism for regulation of dopamine receptor function,

an abnormality of which, is thought to underlie the neuropathology of Schizophrenia.

In a first series of experiments we have undertaken to determine the quantitative distribution of selected dopamine genes in control post mortem brain utilising the Ribonuclease Protection Assay (RPA) technique which allows us to visualise the gene expression of multiple receptors from the same anatomical region of interest and compare them quantitatively.

We have generated a D4 specific riboprobe spanning the 3' end of the coding region and used it to detect D4 mRNA expression in poly(A) + RNA extracted from selected subcortical regions from control post-mortem brain. We also used a Glyceraldehyde 3 Phosphate Dehydrogenase (GAPDH) riboprobe as an internal standard.

D4 mRNA was predominantly expressed in the retina and was detected in most of the brain regions examined including both motor and limbic areas.

These findings argue against a predominantly limbic distribution of the D4mRNA in human brain, and might be of help in understanding the mechanism of action of novel dopamine receptor selective antagonists that might have antipsychotic properties.

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## NR14. Clinical aspects of affective disorders/suicide and self-harm

*Chairmen:* T Craig, J Neeleman

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#### TRANSCULTURAL RESEARCH ON DEPRESSION — STUDY CONCEPT AND PRELIMINARY RESULTS FROM A KENYAN POPULATION

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The goals of our transcultural study on depression were the investigation of symptom profiles, depressive core symptoms and culture specific varieties, influencing psychosocial factors and personality aspects. A polydiagnostic approach including self rating and observer rating instruments, respectively international and culture specific instruments was chosen in order to investigate out-patients with major depression. Translation of the self rating instruments was done in a 3 step translation procedure. A culture specific questionnaire (NOK) was developed in which we laid emphasis on the symptoms not included in the international scales, as well as on the culture-specific expressions and metaphors. The initial study of this project was carried out in Kenya. 75 depressed patients and 50 healthy controls were examined by Beck Depression Inventory (BDI), Hopkins Symptom Checklist (SCL-90R), Clinical Global Impression (CGI), Hamilton Depression Scale (HAMD), Munich Personality Test (MPT) and African Depression Scale (NOK). According to ICD-10 criteria, 44 patients suffered from Major Depression, 4 patients were diagnosed as bipolar, 22 had Dysthymia, 6 patients could not be classified. The differences in average age did not reach significance. In the observer-rating (HAMD) as well as in the self evaluation scales (BDI, SCL-90R), one of the most important symptoms was somatization. In contrast to some other authors is the high percentage of patients with depressed mood (95%) and guilt feelings (65%). The NOK shows the highest correlation with the self-rating scales measuring somatization like the corresponding factor in SCL-90