

of indicating has to follow certain pathways. In addition to the specific indication other stages in this process are distinguished. The *positive time indication* means the period within or after which a treatment should be started. The *negative time indication* aims at preventing unnecessary or disadvantageous continuation of psychotropic medication. The *hierarchical indication* may help the doctor in making an adequate choice between the next, often more serious therapeutic steps to take. A tentative psychopharmacotherapeutic standard was built up by matching the process of indicating with the different groups of psychotropic compounds: antipsychotics, antidepressants, hypnotics, anxiolytics and other sedatives. These psychopharmacotherapeutic guidelines were presented to the medical staff of the general hospital. In a survey two years later one hundred medical files were checked in order to determine if the above mentioned therapeutic guidelines were followed. The data of this survey are presented in this paper.

BIOCHEMICAL CORRELATES OF PERSONALITY DIMENSIONS IN HYPERTHYROID PATIENTS

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In contrast to psychodynamic interpretations within most of psychosomatic studies, the efforts to get insight into biochemical suppositions of personality dimensions of hyperthyroid patients have been, by far, less frequent. Also, there may be encountered various psychopathological manifestations in hyperthyreosis in correlation with neuroendocrine dysbalance. The aim of the study was to get insight into, by determination of thrombocyte monoamine oxydase (MAO) activity, possible biochemical correlates of personality dimensions of hyperthyroid patients. The experimental group consisted of 24 patients, in whom there was diagnosed Graves-type hyperthyroidism. Controls included 34 healthy subjects. For assessment of personality dimensions MMPI-201 test was applied. The MAO activity was determined by fluorimetric procedure (Krajl, 1965.). The obtained score personality profile of hyperthyroid patients corresponds to the profile of a healthy personality. The level increase of scores on the scales of hysteria (Hy), depression (D) and hypochondriasis (Hs) is interpreted as so-called "neurotic trend", i.e. neurotic level of organization of these personalities, with a marked tendency to react, in stress situations, by manifesting psychosomatic reactions. The study results confirm significantly low levels of the thrombocyte MAO activity in the patient group. Such finding indicates noradrenergic/serotonergic (NA/5-HT) dysbalance as a possible biochemical substrate of anxiety (the increase on the scale Hy suggests somatic correlates of anxiety) and depression (the elevated score of the scale D) in the patients. A negative correlation between the scale psychopathic deviate (Pd) and the MAO activity is interpreted within the context of so-called disinhibitory psychopathology, indicating the impaired modulatory (inhibitory) impact of the serotonergic system (the decreased thrombocyte MAO activity).

COMPARISON OF BLACK AND CAUCASIAN MALES ADMITTED TO A PSYCHIATRIC INTENSIVE THERAPY UNIT

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Aim: A review of admissions to the Psychiatric Intensive Therapy Unit (ITU) at the Royal London Hospital revealed that Black patients (Afro-Caribbean and African) were over-represented in comparison to Caucasian patients. We wished to examine differences in the indication for admission, past history and diagnosis between the ethnic groups.

Method: 43 Afro-Caribbean and 19 African males having their first admission to the ITU were identified from a central computer

record, these were matched for age (± 3 years), and sex to a similarly identified Caucasian group.

Results: Black men had significantly longer admissions to the ITU (mean 34 vs. 25 days), and on average the length of their admission to hospital was longer (229 vs. 132 days). Black patients were more likely to have had a diagnosis of schizophrenia (80% vs. 51%) and less likely to have a diagnosis of an affective illness. The incidence of past forensic histories (61%) and previous hospital admissions (71%) were identical. Violence as an indication for admission to the ITU was more frequently recorded in black patients, although the actual number of violent incidents during admission to the ITU were similar. There was a trend for more of the black group to be in the community at follow-up (75% vs. 59%, $p < 0.1$).

Conclusion: The excess of admissions amongst the Black patients may be partially explained by a larger proportion of this group having a diagnosis of schizophrenia (which was associated with longer admissions in both groups). The trend for more of the black patients to be in the community at follow up is consistent with other studies showing a more remitting course of psychotic illnesses in this group.

SEX OF PARENT TRANSMISSION EFFECT IN TOURETTE'S SYNDROME: AGE AT ONSET IN MATERNALLY TRANSMITTED CASES SUGGESTS A GENOMIC IMPRINTING EFFECT

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It has recently been suggested that parent of origin effects possibly caused by genomic imprinting influence the phenotypic expression of a number of heritable human disorders. To test this phenomenon in the Gilles de la Tourette Syndrome (GTS), 437 first degree relatives systematically ascertained through 57 probands were studied. Age at onset, age at diagnosis and phenotypic expressions as observed in the diagnosis of GTS, Chronic Motor Tics & Obsessive Compulsive Behaviours in the offspring of affected males were compared with that in the offspring of affected females. Of the 437 subjects, 16.7% had matrilineal inheritance and 13.9% had patrilineal inheritance, as determined by family history methodology. Chi-square analysis of the different phenotypic expressions and sex of the transmitting parent failed to provide evidence of significant group differences. There were no significant differences when age at diagnosis was compared. However, the maternally transmitted offsprings showed a significantly earlier age at onset. This points to parent of origin effect on the putative GTS gene(s) that could be explained by meiotic events or even intrauterine environmental influences. These findings may help to explain the hitherto conflicting reports about the nature of genetic transmission in GTS, and suggest a need to re-examine family data separately for maternally and paternally transmitted cases, taking into account the possible role of imprinting.

AUSTRALASIAN FIELD TRIALS OF THE DRAFT MULTI-AXIAL VERSION OF THE ICD-10 (MENTAL AND BEHAVIOURAL DISORDERS SECTION)

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Background: A number of versions of chapter V of ICD-10 are being prepared for use in different settings, including clinical practice,

research and primary care. A multi-axial version has also been developed and is currently undergoing field trials. Three centres in Australia and New Zealand have participated in these trials, using the preliminary version of the instrument.

Methods: Pairs of raters independently scored 12 case histories provided by WHO and 10 patients interviewed jointly for diagnoses, disabilities (using the WHO disability assessment schedule) and environmental and circumstantial factors (using a specially developed list). They also coded the applicability of the scales, and the overall ease of use of the multi-axial system.

Results: The levels of agreement on diagnoses were similar to those previously reported. The intraclass correlation coefficients for the 4 subscales of the Disability assessment schedule ranged between 0.41 and 0.51 for the written case histories and 0.52 and 0.60 for the jointly interviewed patients. The values for kappa for the 11 subcategories of environmental and circumstantial factors ranged from 0.03–0.55 for the case histories and 0.35–0.81 for the patients interviewed in each centre. Agreement in the latter group was best for childhood events, problems related to primary support group, and problems related to housing and the social environment ($\kappa \geq 0.67$).

Conclusions: There are problems with the reliability of axis II and III of this system and they have been further developed by WHO in response to these and similar concerns. Case histories used in reliability exercises need careful selection to avoid ambiguities and missing data. Establishing a universal list of environmental and circumstantial factors relevant to psychiatric disorders is a challenging task.

MAGNETIC RESONANCE IMAGING IN ALCOHOLIC KORSAKOFF'S SYNDROME: EVIDENCE FOR AN ASSOCIATION WITH ALCOHOLIC DEMENTIA

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A magnetic resonance imaging study of 19 alcoholic Korsakoff patients, 17 non-amnesic alcoholics and 23 non-alcoholic controls was undertaken. Several measures of ventricular size and interhemispheric area were significantly greater in the Korsakoff patients. Interhemispheric fissure size was greater in the non-amnesic alcoholics than the non-alcoholic controls. Cortical grey matter T1 values were essentially the same for the three groups, while the deep grey and the white matter T1 values for the Korsakoff patients were significantly greater than the non-alcoholic controls. These results indicate widespread cerebral atrophy in alcoholic Korsakoff patients, which is largely subcortical and does not develop independently of the diencephalic pathology. Alcoholic dementia may be a more severe form of alcoholic Korsakoff syndrome, aetiologically related to the nutritionally induced diencephalic pathology rather than the neurotoxic effects of alcohol on the cortex.

A CONNECTIONIST MODEL OF SEMANTIC DEGRADATION IN ALZHEIMER'S DISEASE

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Neuropsychological studies of patients with dementia of Alzheimer's type (DAT) would suggest that specific semantic information is more susceptible to neuropathology, than general semantic information. For example, patients are better able to recognise an item as an instance

of a superordinate category, than they are to name the item (Chertkow and Bub, 1990). They are also better at verifying properties which are true of many items in a category, than those which are specific to few members (Done and Gale, submitted). Such findings have previously been cited in support of hierarchical models of semantic memory (e.g. Collins and Quillian, 1969; Rosch, 1975), in which knowledge is specified at levels ranging from the most general (e.g. animal) to the most specific (e.g. humming-bird). Such models assume discrete levels at which properties are true (e.g. the property 'has wings' is stored at the 'bird' level because it is true of all birds). However, it is rare that properties are true of all members or only one member of a category; rather, they vary between these levels (Komatsu, 1992). This is at odds with the assumptions of hierarchical models, but is better accounted for by neural network models in which the difference between general and specific features, is one of frequency within a training set. We have designed a modular neural network system to simulate the experiments we have run with DAT patients. The network is presented with real images and is trained to construct a semantic representation and then to name each image. We investigate the performance of the model, when connections have been randomly deleted to simulate the neuropathology of DAT. We find that general features are more robust to the effects of 'lesioning' than specific features, and that this has implications for picture naming. We argue that our model provides a more plausible account of the semantic degradation in DAT.

DIFFERENCES OF DYNAMIC EYE MOVEMENTS IN SCHIZOPHRENIA AND AFFECTIVE DISORDERS — A LABORATORY INVESTIGATION USING ELECTROOCULOGRAPHY

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Background: Smooth pursuit performance varies considerably among individuals and is affected by many factors such as the properties of the stimulus, attention, age and neuropsychiatric disorders. In schizophrenia and affective disorders increased rates of saccadic intrusions have been observed during smooth pursuit. The aim of our ongoing study was to compare various dynamic measures of smooth pursuit and saccadic eye movement among depressive and schizophrenic subjects to evaluate a possible diagnosis related specificity.

Methods: 20 schizophrenic and 20 depressive patients were diagnosed according to DSM-IV criteria. Psychopathological symptoms were assessed on the BPRS, SANS, SAPS and Hamilton Depression Rating Scale. All patients underwent a neuroradiological examination comprising also functional imaging. Pursuit was measured during tracking of a predictable, sinusoidal target motion using the Nicolet Nystar oculomotor standard testing protocol.

Results: Both groups showed an elevated rate of inappropriate saccades which was clearly higher for schizophrenic subjects. Also differences in performance of patients peak velocity to peak stimulus was observed. Mean gain values were 0.69 for depressive patients and 0.96 for schizophrenics. A significant difference was found in asymmetry ($p < 0.01$) and DC Offset values ($p < 0.01$) comparing and quantifying left/right symmetry. Other measures including delay and accuracy failed to reach significance.

Conclusion: Our preliminary data show that by oculomotor testing significant diagnosis related differences in eye tracking pattern