potential for providing practical, service-level descriptions of mental health practice.

THE COMORBIDITY OF DEPRESSIVE SYMPTOMATOLOGY IN MALTESE SUBSTANCE USERS

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The main goal of this research is to estimate the prevalence of depressive symptomatology amongst a population of Maltese substance users and to critically evaluate the existing therapeutic setting for patients with coexisting conditions, as well as to propose concrete management changes corresponding with the results of this study.

The study was conducted, using a questionnaire composed of the 'Substance Abuse Assessment Questionnaire', and three depression scales — the 'Beck Depression Inventory', the Zung 'Self-rating Depression Scale', and the 'Visual Analogue Scale for Depression'.

A substantial prevalence of depressive symptomatology among substance users was found. The need of a population survey in Malta for verification of results is suggested. Some implications regarding treatment strategy and management of these cases in Malta are mentioned.

PLATELET IMIDAZOLINE RECEPTORS AND G PROTEINS IN PATIENTS WITH MAJOR DEPRESSION

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Imidazoline receptors (IRs) are a novel family of receptors some of whose members, similarly to α_2-adrenoceptors, are presynaptic inhibitory receptors on the release of noradrenaline. In contrast to α_2-adrenoceptors, however, the signal transduction mechanisms and G proteins associated with the activation of IRs remain largely unknown. The aim of this study was to quantitate by immuno (western) blotting, using specific antibodies, platelet IRs and G protein subunits in drug-free patients with unipolar major depression to test for possible associations between IRs and the various G protein subunits. The study population consisted of 26 depressed patients (10 M, 16 F, 41 ± 2 yr) and 26 matched-healthy controls (10 M, 16 F, 42 ± 2 yr). Human platelets expressed two well-defined immunoreactive IR proteins, an intense band of 35 kDa and a less intense band of 45 kDa (apparent molecular masses in kilodaltons). In platelet membranes of depressed patients, the levels of IR proteins were increased compared to matched-controls (percentage change; 35-kDa IR: 121 ± 4%, $p < 0.001$; 45-kDa IR: 140 ± 5%, $p < 0.0001$, $n = 26$, one-sample t test). In platelets of the same depressed patients, the levels of various G protein subunits were increased, decreased or remained unchanged (percentage change, Gαi2: 141 ± 11%, $n = 22$, $p < 0.001$; Gαi3: 75 ± 7%, $n = 20$, $p < 0.005$; Gαq/11: 120 ± 18%, $n = 19$, $p > 0.05$; Gβ: 103 ± 12%, $n = 18$, $p > 0.05$). There were significant positive correlations between the levels of immunoreactivity of 45-kDa IRs and those of Gαq/11 ($r = 0.64$, $n = 19$, $p < 0.005$), Gαi2 ($r = 0.46$, $n = 22$, $p < 0.05$) and Gβ ($r = 0.62$, $n = 18$, $p < 0.01$), but not of Gαi3 ($r = 0.43$, $n = 20$, $p > 0.10$). In contrast, the levels of immunoreactivity of 35-kDa IRs did not correlate significantly with any of the G protein subunits (Gαq/11, $r = 0.00$; Gαi2, $r = 0.13$; Gαi3, $r = -0.30$; Gβ, $r = 0.10$). The results suggest that platelet 45 kDa IRs, but not the 35 kDa IRs, are linked to signal transduction mechanisms operating through Gαq/11 (stimulation of phosphoinositidase C) and/or Gαi2 (inhibition of adenynyl cyclase) proteins. These results might be of relevance in understanding the functional implications of the abnormal higher expression of IRs in the pathogenesis of major depression.

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NEUROLEPTIC TREATMENT OF MANIA (MEASUREMENT WITH CODE-HD)

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In a double blind cross over clinical trial was examined the treatment of some neuroleptics (haloperidol, chlorpromazine, clozapine) and placebo at unipolar manic patients. The 35 hyperthymic patients was examined by BNO-X and Composite Diagnostic Evaluation of Hyperthymic Disorders (CODE-HD), the severity score by the CGI, the subscale of BPRS and CODE-HD.

The Composite Diagnostic Evaluation of Hyperthymic Disorders (CODE-HD) is a polydiagnostic nosologic method for the manic, hypomanic and euphoric disorders, and the second one after the system of depression (CODE-DD) [1].

Seventeen previous nosologic systems are covered by CODE-HD; Chapter I deals on symptoms with 95 items, glossary definitions for the items, and a severity sub-scale; Chapter II has a semi strukture interview; in Chapter III the decision trees elicitat of these symptoms [2].

Haloperidol's effect was better than the others. The CODE-HD was a useful method to measure the therapeutic effect of the medication at the hyperthymic disorders. It was better than the others.

[1] Ban, T.A. (1989): CODE-DD.
[2] J.M. Brentwood Gaszner, P. and Ban, T.A. (1996): Composite Diagnostic Evaluation of Hyperthymic Disorders (CODE-HD) (in press).

PROPOFOL AND METHOHEXITAL AS ANAESTHETICS IN ELECTROCONVULSIVE THERAPY (ECT): A COMPARISON OF SEIZURE PARAMETERS, SEIZURE QUALITY FEATURES AND VITAL SIGNS

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In a randomised cross-over study, the influence of methohexital and propofol on seizure parameters, seizure quality features, vital signs and oxygen saturation and end-tidal carbon dioxide tension was investigated. A total of 98 treatments were analysed. The treatment were carried out using the Thymatron DGx. ECG, blood pressure, EEG and EEG seizure duration were monitored and the seizure parameters and quality features calculated by the Thymatron EEG computer. The mean dose of atropine was 0.35 mg, of succinylcholine 0.98 mg/kg, of methohexital 1.67 mg/kg and of propofol 2.42 mg/kg. Pure oxygen was used for ventilation. 46 treatments were made with methohexital and 52 with propofol as anaesthetic.

There were no differences in the stimulus parameters as well as the CO_2 and O_2 saturation. The mean seizure duration with methohexital was 54.4 and with propofol 31.7 seconds ($p = 0.000$). Despite these significant differences in the seizure duration, there were no differences in the posticta suppression index (methohexital 77.8%, propofol 79.0%; $p = 0.645$). This means that the seizure duration has no influence on seizure quality features and thus explains why there are no therapeutic differences in all studies when using these two anaesthetics.

There were significant differences in the postictal systolic (methohexital +26.5 mmHg, propofol +11.5 mmHg; $p = 0.000$) and diastolic blood pressure (+20.9/+9.5 mmHg; $p = 0000$) and pulse (+0.8/−7.7; $p = 0.000$), whereby the differences in the systolic RR and pulse