

WHAT DETERMINES THE LENGTH OF PSYCHIATRIC INPATIENT TREATMENT?

A. Stevens, K. Hammer, G. Buchkremer. *Dept. of Psychiatry, University of Tübingen, Oslanderstr. 22, D-72076 Tübingen*

A descriptive analysis of data for 1914 psychiatric inpatients is offered. As part of a major study, the present report focuses on the duration of inpatient treatment and its association with diagnosis and sociodemographic variables. The patients were consecutive admissions at the Psychiatric department of Tübingen University 7/92–2/94. Stays of < 3 days were characteristic for substance abuse (40%) and adjustment disorders (11%). Stays of medium duration (30–120 days) were typical for schizophrenia (33%) and depression (18%), also for neurotic disorders (12%). Patients with very long stays (> 120 days) were most likely schizophrenic (53%), depressed (20%) or neurotic (10%). Mean duration of treatment was 41 days (all diagnoses). The patients with stays over 120 days duration were most frequently women, unmarried, living alone and German. Men and foreigners were prominent in the group treated < 3 days. Patients who had been hospitalized for a long time were more likely to be readmitted. 30% of the long stay patients were not discharged home, rather to another hospital or to aftercare units (!). Treatment duration thus seems only partly determined by diagnosis, rather, gender and sociodemographic traits exert considerable influence. Taking into account the enormous expenses caused by long term treatment, it seems mandatory to discern and reevaluate the reasons for ongoing inpatient treatment. More frequent use of psychotherapeutic or alternative treatment services is recommended.

REPRESENTATIVE SAMPLING IN A UK RANDOMISED CONTROLLED TRIAL

K. Harvey, C. Samele, T. Burns. *St George's Hospital Medical School, Community Psychiatry Section, Department of General Psychiatry, Jenner Wing, Cranmer Terrace, London, SW17 0RE, England*

The increasing use of randomised controlled trials in the evaluation of mental health services requires the "representativeness" of a sample to be addressed as a key methodological issue.

Method: In a UK trial evaluating intensive case management for the severely mentally ill one step taken to ensure "representativeness" was to use a criteria based sampling frame. All subjects identified as meeting the following criteria were approached for interview: aged 18–65, a diagnosis of psychosis, at least two psychiatric admissions one of which was within the last two years.

Basic demographic information and data regarding psychiatric history was collected for all subjects identified and the "representativeness" of the subjects who entered the study was analysed.

Results: 309 subjects were identified and of those 196 entered the study. Preliminary findings suggest that there were no significant differences between the subjects who entered the study and the identified population.

Conclusions: While this approach enabled the "representativeness" of the study population to be assessed it was achieved at the cost of targeting the clinically most relevant group who would be identified by asking "which of your patients is most difficult to maintain outside hospital?"

A STUDY OF COMBINED THERAPY WITH MOCLOBEMIDE AND SSRIS IN 50 PATIENTS: FINAL REPORT

C.J. Hawley, S. Quick, T. Sivakumaran, S. McPhee, H. Pattinson. *Hertfordshire Neuroscience Research Group, the collaborative research programme between QEII Hospital and University of Hertfordshire, Hertfordshire, AL10 9AB England*

Non response to treatment in Major Depression is a sizable problem. This study was designed to obtain data on the safety of therapy with an SSRI/RIMA combination, and to gather open data on efficacy which might suggest that a placebo controlled study would be justified. A previous preliminary report in 19 patients had suggested that although there are possible interactions, combined treatment of this sort is adequately tolerated by the majority of patients.

Patients with Major Depression who had attained at least level 4 resistance were treated in a non blind protocol for six weeks. Moclobemide was added incrementally, target dose 600 mg/day, to stabilised therapy with paroxetine (20 mg) or fluoxetine (20 mg). Assessment of adverse events was made weekly using the ECDUE model. Symptoms were measured weekly with the MADRS, CGI(I), CGI(s) and pGI.

There were 188 adverse events in 50 evaluable patients. The severity of these events was; mild-67, moderate-79, severe-37, serious-5. The most common events were; insomnia (32), nausea or vomiting (20), headache (17), dizziness (11), dry mouth (9), myoclonic jerks (7) and cardiovascular symptoms (6). Insomnia and nausea were the events most consistently considered to be probably or definitely related to treatment. Serious events were ataxia, prostration, central chest pain, paracetamol overdose and visual hallucination. The central chest pain, paracetamol overdose and visual hallucinations were considered unrelated to the treatment. Mean MADRS fell from 29 points (week 0) to 22 points (week 6) (paired t-test $p < 0.01$). 11 patients achieved full remission ($MADRS \leq 11$). The Global scales paralleled the changes seen in MADRS. Although total mean MADRS reduced serially at each week, scores on item 4 (reduced sleep) increased between week 0 and week 3, suggesting that the combination therapy was associated with an increase in sleep disturbance.

These findings, although open and uncontrolled, cause us to challenge previous reports of a low potential for interaction between RIMAs and SSRIs. The combination appears possibly effective, but potentially toxic. We recommend the use of this combination therapy only where close monitoring procedures can be assured.

A REVIEW OF THE PSYCHOMOTOR EFFECTS OF PAROXETINE

C.J. Hawley, S.A. McPhee, V.R.H. Smith, A.G. Roberts. *Hertfordshire Neuroscience Research Group, the collaborative research programme between QE II Hospital and University of Hertfordshire, Hertfordshire, AL10 9AB England*

All placebo controlled studies of the psychomotor effects of paroxetine are reviewed. The total number of subjects is 195. The majority of studies show little or no effect of paroxetine on psychomotor function.

In four single dose studies paroxetine did not differ significantly from placebo on any objective measure of psychomotor function whereas control drugs, such as amitriptyline and haloperidol, produced conspicuous impairments. In five of six repeat dose studies paroxetine did not differ from placebo in terms of adverse effects on psychomotor function. In the sixth study paroxetine 40 mg. produced abnormalities on 3 tests (critical tracking, divided attention task and choice reaction time) but paroxetine 20 mg. produced no such effects. The psychomotor effects of the 40 mg. dose of paroxetine

were much less than those of the control drug, amitriptyline, at a dose of 75 mg. In three of the ten studies there was evidence that paroxetine could cause slight psychomotor enhancement indicated, for example, by increased threshold on critical flicker fusion test.

In summary; No adverse effects of paroxetine are apparent at the dose of 20 mg./day, although minor impairments can be identified at 40 mg./day. An overview of the data indicates that at the standard therapeutic dose of 20 mg./day, paroxetine has no psychomotor or behavioural toxicity.

SOCIAL FACTORS IN SUICIDE

M.E. Heikkinen, E.T. Isometsä, M.J. Marttunen, H.M. Aro, J.K. Lönnqvist. *National Public Health Institute, Department of Mental Health, Mannerheimintie 166, FIN-00300 Helsinki, Finland; Tampere School of Public Health, University Tampere, Tampere, Finland*

Background: The study objective was to investigate the age-related variation of social factors in suicide.

Method: Age-related variation in marital status, living arrangements, activity in working life and social interaction factors were investigated in an entire 12-month suicide population in Finland ($N = 1.067$); the findings in suicide were compared with appropriate census data.

Results: Several social factors varied across age groups among suicides, with some age-related sex differences. Compared with the general population, the suicides were more commonly never married (especially males aged 30–39 years), divorced, and widowed (especially females aged 60–69 years); living alone was more frequent among the suicides, as was living with parents among male suicides aged 25–39 years. A history of psychiatric hospitalization was especially common among young male suicides who had never married or were living with parents. Living alone was particularly frequent among middle-aged male suicides who had misused alcohol.

Conclusions: While most of the age-related variation in social factors found in suicide seems to parallel the natural variation of these factors in the general population, the results suggest that some social findings in suicide might be related to the victims' psychopathology and excessive alcohol use.

TREATMENT OF MODERATELY OR SEVERELY DEPRESSED PATIENTS WITH NEW ANTIDEPRESSANT MIRTAZAPINE

M. Zivkov, J.T. Helsdingen. *Medical Services Department, NV Organon, PO Box 20, 5340 BH Oss, The Netherlands*

Antidepressant treatment is recommended as the first-line therapy for moderately or severely depressed patients. Mirtazapine is a potent antagonist of α_2 adrenoceptors, 5-HT₂ and 5-HT₃ serotonin receptors, while it does not block 5-HT_{1A} receptors. Its antagonism of pre-synaptic α_2 adrenoceptors is the mechanism whereby mirtazapine enhances the release of noradrenaline. The enhanced release of noradrenaline causes stimulation of 5-HT cell firing and 5-HT release through activation of α_1 adrenoceptors on serotonergic soma and/or dendrites. Hence mirtazapine enhances both noradrenergic and serotonergic neurotransmission, and it can be best described as noradrenergic and specific serotonergic antidepressant (NaSSA). This mode of action may be accounted for its high efficacy in the treatment of depressed patients, including severely depressed (17-item HAMD scores at baseline ≥ 25). To assess the efficacy of mirtazapine in the treatment of patients with a DSM III diagnosis of a Major Depressive Episode (single or recurrent), an analysis was performed on pooled data from subgroups of moderately or severely depressed patients participating either in the placebo-

amitriptyline-controlled studies of mirtazapine. The patients were stratified according to their total 17-item HAMD scores at baseline: scores of 18–24 were indicative of moderate depression; at least 25 of severe depression. In the subgroup present with moderate depression, significantly larger reduction from baseline were present in the mirtazapine group compared to placebo group ($p \leq 0.01$). Matching results were obtained in the analysis of the severely depressed patients: reductions from baseline during treatment with mirtazapine were statistically and clinically significantly larger than with placebo ($p \leq 0.01$). In pooled data analysis comparing mirtazapine with amitriptyline, equivalent reductions from baseline were found both for the moderately depressed group and severely depressed group of patients. These results demonstrate that mirtazapine is effective in the treatment of both moderately and severely depressed patients.

NEUROENDOCRINOLOGICAL REACTION TO THE TRYPTOPHAN-DEPLETION-TEST IN PATIENTS WITH SEASONAL AFFECTIVE DISORDER WHO RESPONDED TO LIGHT THERAPY

B. Hesselmann, A. Neumeister, N. Praschak-Rieder, U. Bailer, S. Kasper. *Department of General Psychiatry, University of Vienna, Währinger Gürtel 18–20, A-1090 Wien, Austria*

Some studies describe hormonal dysregulations during episodes of depression, which disappear with remission. Further investigations were able to describe a reduction of brain serotonin activity. Tryptophan-Depletion (TD) induced by ingestion of a tryptophan-free amino acid drink lowers serotonergic function and has been shown to induce symptoms of depression. Therefore we studied hormonal and psychometric reactions to TD in a double-blind placebo-controlled balanced cross-over design in 12 drug-free patients with seasonal affective disorder (SAD). Patients were in stable remission induced by light therapy. Blood samples were obtained one day and 30 minutes before as well as 5 and 7 hours after TD. After TD we found a significant increase in Hamilton Score ($p < 0.01$) and a significant decrease of total ($p < 0.001$) and free tryptophan ($p < 0.001$). During TD and placebo mean plasma concentration of prolactin raised statistically non-significant, while TD was tended to be combined with higher concentrations. Cortisol plasma concentration fell statistically significant during TD (8 a.m.:2 pm $p < 0.05$; 8 a.m.:4 p.m. $p < 0.05$) and tryptophan administration TD (8 a.m.:2 pm $p < 0.005$; 8 a.m.:4 p.m. $p < 0.005$). Concentrations were statistically higher in TD compared to placebo (2 p.m. $p < 0.05$; 4 p.m. $p < 0.001$). Changes of TSH, T3 and T4 were of no clear relation with regard to TD or control testing. Conclusively our results indicate that TD might influence neurohormonal systems as well as the serotonergic system. Moreover during TD we were able to describe a coincidence of depressive symptoms, a decrease in plasma cortisol level and a raise in prolactin concentration.

PROLACTIN SECRETION IN DEPRESSIVE ILLNESS AND HEALTHY CONTROLS AS A RESPONSE TO THE CITALOPRAM-CHALLENGE-TEST (CCT)

B. Hesselmann, T. Kapitany, S.D. Schindler, Ch. Barnas, W. Sieghart, S. Kasper. *Department of General Psychiatry, University of Vienna, Währinger Gürtel 18–20, A-1090 Vienna, Austria*

The Citalopram-Challenge-Test (CCT) is one approach to investigate the reactivity of the serotonergic neurotransmitter system, which is thought to be downregulated in depression. Citalopram, a substance inhibiting serotonin reuptake, leads to an immediate secretion of prolactin in normals. Our study is designed to describe differences in prolactin and cortisol to the CCT. 12 patients, meeting criteria vor