

and ward D 28.4% of unvoluntarily admissions, d. No differences between the number of unvoluntarily admissions, the reasons for closing or the diagnosis, connected with closed doors, occurred. But the duration of closing time was definitely shorter on ward D. We think that milieu factors are responsible for this difference. The next part of our running study will be the questionnaire ward atmosphere scale to differentiate this suggestions and to look if the closing time on the other wards changes by using ideas like a door-keeper or one-to-one continuous observation.

P02.339

RELIABILITY AND VALIDITY OF THE PSYCHOSOCIAL APTITUDE AND EFFICACY RATING SCALES (PARS) IN A SCHIZOPHRENIC PATIENT SAMPLE

G. Darcourt¹*, P. Martin², D. Lethuaire³, C. Ferretti², D. Gérard³.
¹Dept. de Psychiatrie, CHU Pasteur, 06002 Nice; ²Hopital St Antoine, Unité de Recherche, Dpt. de Psychiatrie et AMC, 70 bd de Courcelles, 75017 Paris; ³Sanofi-Synthelabo, 92355 Le Plessis-Robinson, France

Background: This study was conducted to validate the Psychological Aptitude Rating Scale (PARS), French rating scale for measuring the subject's aptitude to communicate.

Method: Psychometric properties of the PARS were assessed in open six months follow up study. Patients: 445 (mean age: 32 sd 8 years -, male: 66%) with schizophrenia paranoid subtype or schizophrenic disorder (DSM-IV), treated with amisulpride.

Sociodemographic characteristics, clinical profile (BPRS, PANSS), social functioning using the original 10 items unique component (PARS) and treatments, were collected during a medical visit.

Results: PARS: According to Kaiser's criteria and screen test issues of an exploration factor analyses, a one factor solution was retained with eigenvalue higher than 1.

Factor 1: approximately 94% of the common variance in the data set. The internal consistency measured by the Cronbach's coefficient alpha: high reliability (0.91).

Pearson's coefficient determinating inter-item correlation: range from 0.31 to 0.67 ($p = 0.0001$).

Test-retest: significant reliability (day 0 to day 90 and D 0 to D180: $r = 0.59$ and $r = 0.54$ respectively, $p = 0.0001$).

A significant sensibility to changes was observed.

Significant correlation between total score PARS: -and PANSS negative cluster ($r = 0.46$), positive cluster ($r = 0.28$); $p < 0.001$; respectively; - and total BPRs score, schizophrenia BPRS subscores ($r = 0.32$; $p < 0.001$, respectively) without depression BPRS subscores.

Conclusion: PARS is a reliable and valid measure for the assessment of adaptative functioning, particularly psychosocial aptitude in schizophrenic patients.

P02.340

PREDICTIVE FACTORS FOR MENTAL HEALTH IN PATIENTS ADMITTED FOR ISCHAEMIC CARDIOPATHY IN A UNIVERSITY HOSPITAL IN THE SOUTH OF SPAIN

J. Elorza*, I. Ramos, F. Fernandez-Palacin, I. Failde. *I Paseo Marítimo, 5° C, 11010 Cadiz, Spain*

Objective: To determine the factors predicting the mental health state (MHS) of patients with suspected Ischaemic Cardiopathy (IC) in a University Hospital.

Methodology: Patients admitted in the Cardiology Service for acute thoracic pain with suspected IC were studied. According to

clinical data, ECG and biochemical analysis, the patients were divided into 4 diagnostic groups: acute myocardial infarction, unstable angina, non-ischaemic cardiology and non-cardiology. The socio-demographic and clinical variables were obtained from a questionnaire and the clinical records. To determine MHS, GHQ-28 was used (cut-off point ≥ 6). To study the variables associated with MHS, the raw Odds Ratios (OR \pm 95% CI) and fitted according to a logistic model were calculated. The data were tabulated and analyzed using the SPSS v.8.

Results: 185 patients were included in the study (mean age 60.2 years; SD = 10.4; 72% males). The mean score on the GHQ-28 was 6.3 (SD = 5.3) and 49.2% presented scores ≥ 6 . The raw OR of "probable psychiatric case" was higher for women (OR = 2.8, 95% CI: 1.4-5.5), housewives (OR = 4.1, 95% CI: 1.1-15.1), and for patients under treatment for arterial hypertension (OR = 2.4, 95% CI: 1.3-4.3). The adjusted OR showed that the female (OR = 2.5, 95% CI: 1.2-5.0), the personal history of IC (OR = 2.3, 95% CI: 1.1-4.4), and receiving treatment for hypertension (OR = 2.04, 95% CI: 1.1-3.9) were predictive variables for a worse MHS.

Conclusion: The percentage of subjects with probable psychiatric pathology was high. Early diagnosis and psychiatric treatment together with monitoring of the risk factors of the ischaemic cardiopathy, could contribute to improving the overall clinical evolution of the patients.

P02.341

DEPRESSIVE SYNDROME IN SCHIZOPHRENIA - A PSYCHOSOCIAL ASPECT

Lj. Lepasavić*, G. Nikolić-Balkoski, J. Barišić, Z. Barac, S. Milovanović. *Pasterova 2, Belgrade 11 000, Yugoslavia*

Psychosocial factors, though unclearly defined as etiological factors of depressive syndrome in schizophrenia, are much clearly defined as pathoplastic factors, primarily due to research which referential framework is based on family systems theory and contemporary studies of cognitive processes in social context. Today it is generally accepted that depression in schizophrenia doesn't have only one etiologic factor: it may be an integral part of schizophrenia itself, psychological consequence of illness or adverse effect of antipsychotics on clinical expression in schizophrenia, in the focus of attention are social skills training, cognitive-behavior therapy and family therapy. Socioterapy methods are mainly based on the concept of community based rehabilitation, recently being promoted by the World Health Organisation

P02.342

SIX-MONTH OUTCOME OF ELECTROCONVULSIVE THERAPY AND REPETITIVE TRANSCRANIAL MAGNETIC STIMULATION TREATMENT IN SEVERELY DEPRESSED PATIENTS

P.N. Dannon*, L. Grunhaus, O.T. Dolberg, S. Schreiber. *Chaim Sheba Med. Ctr., Psychiatry Ward, Tel Hashomer, 52621, Israel*

Objective: Repetitive transcranial magnetic stimulation (rTMS), a new method for the stimulation of central nervous system and appears to be effective treatment for Major Depression. The longitudinal outcome of rTMS has not been described. The aim of the study is to report six-month outcome of MDD patients treated with either ECT or rTMS.

Method: Patients diagnosed with MDD referred for ECT was randomly assigned to receive either ECT or rTMS. 24 patients responded to either treatment constitute the sample. Patients received antidepressant drug treatment and followed on monthly

basis and outcome determined with the Hamilton Rating Scale for Depression and the Global Assessment of Function scale.

Results: There were no differences in the six-month relapse rate between two groups. 25% of the patients in either group relapsed.

Conclusions: Patients treated with rTMS do as well as those treated with ECT at the six-month follow-up point. Our data suggests the clinical gains obtained with rTMS are long lasting.

- (1) Pascual-Leone A, Rubio B et al (1996), Safety of rTMS of LDLPF cortex in drug-resistant depression. *Lancet* 348: 233–237.
- (2) George MS, Lisanby SH, Sackeim HA (1999), TMS applications in psychiatry. *Archives of General Psychiatry* 56: 300–311.

P02.343

ELECTROCONVULSIVE THERAPY IS EFFECTIVE IN THE TREATMENT OF PATIENTS WHO FAILED TO RESPOND TO A COURSE OF REPETITIVE TRANSCRANIAL MAGNETIC STIMULATION

P.N. Dannon*, R. Amiaz, S. Schreiber, L. Grunhaus. *ECT-TMS Unit, Chaim Sheba Med. Center, Tel Hashomer 52621, Israel*

Background: Transcranial Magnetic Stimulation (TMS) has been proposed as a potential substitute of Electroconvulsive therapy (ECT) in severely depressed individuals. In this naturalistic study we report on the outcome of TMS resistant patients who were subsequently treated with ECT.

Methods: Fifteen rTMS non-responders patients were treated with ECT. Eleven of them suffered from MDD with psychotic features and four of them suffered from non-psychotic MDD. All the patients were assessed with the Hamilton Rating Scale for Depression (HRSD), the Brief Psychiatric Rating Scale (BPRS), the Global Assessment of Function Scale (GAS) and the Pittsburgh Sleep Quality Index (PSQI). Response to treatment was defined as at least a 50% decrease in the final HDRS score and a final GAS higher than 60.

Results: Six out of eleven psychotic patients and two out of four nonpsychotic patients responded to ECT. HRSD ($p < 0.04$, $t: -3.1$), GAS ($p < 0.08$, $t: 2.4$) and PSQI ($p < 0.06$, $t: -2.9$) scores changed significantly with ECT.

Conclusions: In this group of resistant patients ECT improved an important proportion of them. Although we did not have a comparison group of patients treated initially with ECT, it appears that the response rate to ECT of this sample was lower than that reported in other studies of ECT in depression

P02.344

REPETITIVE TRANSCRANIAL MAGNETIC STIMULATION IS EFFECTIVE AS THE FIRST TIME IN THE TREATMENT OF RELAPSE OF DEPRESSION

P.N. Dannon*, S. Schreiber, O.T. Dolberg, L. Grunhaus. *Chaim Sheba Med. Ctr., Psychiatry Ward, Tel Hashomer, 52621, Israel*

Objective: The aim of the study is to demonstrate the efficacy and the safeness of repeated repetitive transcranial magnetic stimulation (rTMS) in the treatment of relapse of depression.

Method: Five patients who were treated successfully with rTMS relapsed and received a second rTMS course. TMS was performed with MAGSTIM rapid equipment delivering 90% power of the motor threshold. The stimulation frequency was 10 HZ for 6 sec for 20 trains. Patients treated 20 treatment days. Clinical assessments were performed with the Hamilton Rating Scale for Depression

and the Global Assessment of Functioning scales at baseline, at week two, and at the end of the treatment.

Results: No significant differences found between the rating scales at the end of the treatment courses. There were no side effects due to rTMS treatment.

Conclusions: The second rTMS course was effective and safe as the first course.

- (1) Belmaker RH (1995), TMS-a potential new frontier in psychiatry, *Biological Psychiatry* 38: 419–421.
- (2) Grunhaus L, Dannon PN et al (in press) rTMS effective as ECT in the treatment of non-delusional MDD, *Biological Psychiatry*.

P02.345

LITERACY RATE, GROSS DOMESTIC PRODUCT AND SUICIDE RATE IN 33 EUROPEAN COUNTRIES

A. Marušić*, M. Khan, A. Farmer. *Institute of Psychiatry, London, UK*

We present a study of the associations between suicide and literacy rates for both male and female populations in 33 European countries where data for both rates are available. For both sexes, high literacy rates significantly predict high suicide rates even when controlling for gross domestic product – purchasing power parity (GDP) and age distribution. It is suggested that literacy rates may represent an important ecological risk factor for completed suicides. Two potential mechanisms for negative impact of high literacy rates can be made; the first is that high literacy leads to a better understanding of impoverished social circumstances. Indeed, when the GDP per capita is added to the linear regression model, the latter improves considerably. The second potential mechanism is that more literate individuals move more rapidly from simple pessimistic views towards hopelessness and suicidal ideation. On the other hand, it is also possible that literacy is just a confounding variable. For example, suicide statistics might be more reliable in countries with higher levels of literacy. Nevertheless, the striking finding that literacy and suicide rates are associated is worthy of further investigation.

P02.346

CORRELATION BETWEEN SUICIDE RISK, TIME SPENT IN PRISON AND VULNERABILITY PROFILE OF PEOPLE IN CONFINEMENT

P. Frottier¹*, K. Ritter¹, S. Frühwald¹, F. König², P. Bauer². ¹*Clinical Department of Social Psychiatry, Vienna University Medical School, Währinger Gürtel 18-20;* ²*Department of Medical Statistics, University of Vienna, Schwarzspanierstraße 5, A-1090 Vienna, Austria*

Previous studies have identified correlations between suicide and time spent in prison. The results however were contradictory. It was criticised that naive statistical approaches do not adequately account for the vulnerability profile of prisoners. To evaluate the suicide risk in prison a study was conducted using the case notes of all suicides ($n = 247$) having occurred in Austrian prisons between 1975 and 1999. The suicide risk factors associated with different circumstances (sentenced prisoners, prisoners on remand, length of custody, length of fine) were studied.

Method: The hazard was calculated, which reflects the suicide risk for the individual within a defined period of custody, using the Nelson-Aalen-estimator.