ductive symptomatology. PANSS scale was used for the assessment of the severity of symptoms and the efficacy of treatment. They were rated at the beginning of the treatment (or after 3-7 days washout period) and once a week for six weeks. The dose range administered daily was between 100-200 mg. No other concomitant therapy was given, except for hypnotics occasionally. After six weeks treatment significant improvement was seen in 14 patients (74%) and observed as a significant decrease (more than 58%) in final PANSS scores compared to the scores at the beginning of the treatment. Greater improvement was noticed in depression than in negative subscale. Other 3 patients showed improvement noticed as 20% decrease in the final score. Two patients were nonresponders and had to be treated in a different way. The tolerability of sulpiride was very good in terms of subjective complaints, laboratory findings and ECG. The only frequent complaints were increased appetite and weight gain which was observed at the end of treatment (6-10% increase in weight from the beginning of treatment) Although our sample is small, it proves the efficacy of sulpiride in the treatment of negative forms of shizophrenia, especially when depressive symptoms are present. It should not be forgotten especially because of good tolerability.

## BRAIN MAPPING, RELAXATION AND PERSONALITY

<u>J. Cabanyes</u><sup>1,2</sup>, A. Polaino-Lorente<sup>2</sup>, A. Dávila<sup>1</sup>, R. Martínez<sup>2</sup>. <sup>1</sup> Behavioural Neurology, Clínica Ntra. Sra. de la Paz, López de Hoyos 259. 28043, Madrid, Spain; <sup>2</sup> School of Education, Universidad Complutense, López de Hoyos 259. 28043, Madrid, Spain

Introduction: The bioelectrical brain activity changes in several psychophysical situations that the subject could meet. At the same time, several subjects could respond in different manner to the same stimuli. The present work studies the bioelectrical brain changes produced after applying a technique of relaxation and the differences according to some characteristics of personality.

Material and method: Subjects: 54 healthful volunteers, university students, with same distribution of sex and a range of age of 20 to 24 years old (x: 21.5). Procedures: all of the subjects completed the Cattell's personality questionnaire (16PF, forms A and B), a questionnaire of social abilities and a scale of manual dominance. Two electroencephalografic records were carried out to each subject: in awake resting situation with closed eyes and after applying a technique of muscular and respiratory relaxation. The records were obtained with a Cadwell Spectrum 32 equip, with 21 electrodes placed according to the 10/20 international system and linked ears reference. From each registration 30 epoch of 2.5 seconds were recorded and maps of absolute power, relative power, interhemispheric asymmetry and interhemispheric coherence were created. Maps of averages were created according to the scores obtained in the second order factors of the 16PF and they were compared among themselves and between the awake resting situation and relaxation.

*Results:* Significant overall differences between the two studied psychophysical situations were obtained, especially in the absolute power in the beta rhythms. At the same time, we were found bioelectrical behavior significantly different in relationship to characteristics of personality measured with the 16PF.

*Conclusions:* The situation of relaxation associates an bioelectrical brain activity different from awake resting situation. Some characteristics of personality are related to several bioelectrical brain responses to the stimuli. Brain mapping is an useful technique in order to measure these changes.

#### TREATMENT RESPONSE STUDIES IN SYSTEMATIC CATATONIA (LEONHARD) II AMINEPTINE AUGMENTATION

L.Y. Chow, G.S. Ungvari, B.S.T. Lau, H.F.K. Chiu, C.K. Wong. Department of Psychiatry, Chinese University of Hong Kong, Shatin, Hong Kong

*Objectives:* Our objective was to establish the treatment response pattern of the Leonhardian group of systematic catatonias in a series of double-blind, placebo-controlled cross-over drug trials. This report presents the findings of amineptine augmentation in systematic catatonia.

Method: 21 patients with chronic schizophrenia, who met operationalized criteria for systematic catatonia according to Leonhard (Petho & Ban, 1988) and gave informed consent, were selected from the entire patient population of two long-term rehabilitation facilities. All subjects were physically healthy and had no past or current history of substance abuse. Amineptine HCI (200 mg/day) and identical-looking placebo were added consecutively for 6 weeks each to the patients' existing drug regime under double blind conditions, followed by a 4-week wash-out period. Assessment using the GAS, BPRS, HDRS, SANS, AIMS, Simpson-Angus Scale, Van Putten Akinesia Scale, Barnes Akathisia Rating Scale, Modified Rogers Scale, Bush-Francis Catatonia Rating Scale and the NOSIE was carried out at baseline and at 3 weekly intervals afterwards. Raters were blind to the patients' medication status.

*Results:* Amineptine HCl augmentation resulted in minimal improvement in depression and negative symptom ratings, but did not significantly change the motor status of patients with systematic catatonia.

Conclusion: Amineptine HCl is an antidepressant known to enhance dopaminergic transmission. The lack of therapeutic effect of amineptine, on catatonic symptoms appearing in systematic catatonias therefore suggests that a dysfunctional dopamine system is not a major factor in the pathogenesis of motor symptoms in these particular subtypes of catatonic schizophrenia.

#### HOW ARE PSYCHOTIC SYMPTOMS PERCEIVED? A COMPARISON BETWEEN PATIENTS, RELATIVES AND THE GENERAL PUBLIC

K.F. Chung, Eric Y.H. Chen, Linda C.W. Lam, Ronald Y.L. Chen, Charlotte K.Y. Chan. Department of Psychiatry, University of Hong Kong; Department of Psychiatry, Chinese University of Hong Kong

Objective: The early detection and treatment of psychosis depends on the extent to which patients, their relatives and the general public are able to recognize psychotic symptoms as features of mental illness requiring medical attention. We compared the attitudes towards psychotic symptoms in schizophrenic patients, their relatives and the general public. We explored the relationship between such attitudes and demographic variables, as well as with a history of previous contact with mental patients. In addition, we also compared the attitudes to their own symptoms.

Method: In order to provide a common reference for comparison, we constructed a case vignette that described classical positive symptoms of schizophrenia in everyday language. The vignette approach was selected because it provided a more tangible scenario in which attitudinal responses could be measured. We used the case-vignette to compare 44 in-patients and 47 out-patients with schizophrenia, 48 of their relatives and 43 members of the general public with respect to their attitudes towards schizophrenic psychotic symptoms.

*Result:* Subjects from the general public tended not to recognize psychotic symptoms as features of mental illness and they tend not to consider drug treatment and hospitalisation as indicated. Sex, ed-

ucational level as well as previous contact with the mentally ill were found to be significant determinants of the attitude. In addition, we found that schizophrenic patients generally considered themselves as less mentally unwell than the person in the vignette.

*Conclusion:* These findings suggest a need for public mental health education in order to improve the level of recognition of mental illness. The relationship of the attitudes with sex, educational level and previous contact with the mentally ill could assist the planning of such educational programme.

## EVIDENCE FOR CHOLINERGIC ABNORMALITIES IN PANIC DISORDER

#### J.M. Cooney, T.G. Dinan. Department of Psychological Medicine, St. Bartholomew's Hospital, London ECIA 7BE, UK

Panic disorder is characterised by a number of physiological and psychological changes. Among the neuroendocrine abnormalities are blunting of the growth hormone (GH) response to clonidine, lowered ACTH to cortisol ratio following corticotropin-releasing hormone and reduced TSH and prolactin release following TRH. These changes overlap with those identified in major depression. Pyridostigmine (PYD) increases cholinergic neurotransmission which reduces somatostatin (SS) tone at the hypothalamus and allows GH release. In patients with major depression, GH release is augmented which is consistent with Janowsky's postulated cholinergic overactivity in depression. We examined the PYD/GH response in 16 patients with DSM-IIIR panic disorder and an age and sex matched comparison group to determine whether there is evidence for cholinergic abnormalities in panic disorder. Mean basal (± SEM) GH levels did not differ significantly between those with Panic Disorder (2.03  $\pm$  0.35 mU/L) and the comparison group (1.01  $\pm$  0.24 mU/L). Peak GH levels, as measured by mean  $\Delta GH$  (difference between basal and maximal following PYD) were significantly elevated with Panic Disorder (14.87  $\pm$  0.65 mU/L) compared to healthy volunteers (6.73  $\pm$  0.65 mU/L). This finding indicates that there is evidence to suggest increased cholinergic neurotransmission in panic disorder. This is consistent with other neuroendocrine abnormalities seen in both depression and panic disorder and merits further investigation.

#### HIGH DOSE ANTIPSYCHOTIC MEDICATION: THE IMPACT OF THE ROYAL COLLEGE CONSENSUS STATEMENT ON PRESCRIBING PRACTICE

#### P.L. Cornwall, F. Hassanyeh. St Nicholas Hospital, Jubilee Rd, Gosforth, Newcastle upon Tyne, NE3 3XT, UK

Aims and Methods: This study examined whether antipsychotic prescribing practice has changed since the publication of the Royal College of Psychiatrists Consensus Statement on the Use of High-Dose Antipsychotic Medication which considered that the widespread use of high-doses was unlikely to be always justified. The case notes of patients admitted to a 17 bed psychiatric intensive care unit were examined for the periods 1.4.93 to 31.3.94 (prior to publication of the statement) and 1.9.94 to 31.5.95 (after publication). The highest daily dose of antipsychotic medication in chlorpromazine (CPZ) equivalent doses was recorded for each patient along with data on patient characteristics, diagnosis and treatment.

Results and Conclusions: There were 76 admissions involving 63 patients in each sample. There were no significant different in terms of age, sex, ethnicity or diagnosis. The mean highest daily dose (in CPZ equivalents) fell from 1782 mg to 1379 mg, (t = 2.04, d.f. = 118, p = 0.04). The dose reduction was most marked in those patients with a diagnosis of schizophrenia (2189 mg vs. 1542 mg; t = 2.83, d.f. = 51, p = 0.007). The proportion of patients on more than one regular antipsychotic drug also fell (32/57 vs. 20/62,  $\chi^2 = 6.9$ , d.f. =

1, p = 0.009). The results provide some preliminary evidence that the publication of the Royal College Consensus Statement has resulted in more cautious use of high-dose antipsychotic medication.

### CORRECTION FOR ATTENUATION IN TC-99m HMPAO SPECT IN OBSESSIVE COMPULSIVE DISORDER

B. Crespo, M. Encinas, J.A. Cabranes, I. Lopez-Ibor. Servicios de Psiquiatría y Medicina Nuclear, H.U. San Carlos, C/ Martín Lagos s/n. Madrid 28040, España

Imaging findings have been incorporated within several conceptualizations of the neuropathology of obsessive compulsive disorder (OCD), which focus on aberrations in sensory, response and emotional systems resulting from aberrant frontal lobe or basal ganglia functioning.

Single-photon emission computed tomography (SPECT) has the potential to be quantitative. However, attenuation is the major limitation of quantitation in SPECT. Attenuation also affects the quality of images by reducing lesion contrast and producing "hot rim" artifacts. Therefore, attenuation must be compensated for to ensure accurate quantitation and to improve the quality of images.

Material and Methods: 22 patients were recruited for the protocol with diagnosis of OCD, DSM-III-R criteria. 9 subjects met DSM-III-R criteria for depression. All patients were studied by SPECT at rest. 10 areas were studied. We compared the result of OCD patients with and without correction for attenuation in these areas, with the results in the control group.

The results will be shown at the Congress.

# ANOMALIES OF DERMATOGLYPHICS IN PATIENTS WITH SCHIZOPHRENIA

<u>M. Dabkowska</u><sup>1</sup>, A. Araszkiewicz<sup>1</sup>, J.K. Rybakowski<sup>2</sup>. Department of Psychiatry, Medical Academy, ul. Kurpińskiego 19, 85-096 Bydgoszcz, Poland; <sup>2</sup> Department of Adult Psychiatry, University of Medical Sciences, ul. Szpitalna 27/33, 60-572 Poznań, Poland

Neurodevelopmental hypothesis of schizophrenia postulates an environmental stressor (e.g. viral infection) operating during the second trimester of pregnancy. During this period, neural cell migrate to the cortex and fingertip dermal cells migrate to form ridges. The patterns of dermatoglyphics are assumed to be markers of developmental disturbances in second trimester. In patients with schizophrenia, a higher frequency of dermatoglyphic anomalies was recently reported.

In this study, finger and palmar dermatoglyphics were assessed in 20 patients with schizophrenia (12 male, 8 female), aged 18-56 years, and in 25 healthy subjects (7 male, 18 female), aged 20-24 years, by means of standard ink technique.

The most frequent fingertip patterns in both groups were ulnar loops and whirls. Prevalence of radial loops on right and left hand was different in schizophrenic patients (9 out of 11 on right hand) compared with control group (10 out of 14 on the left hand)( $\chi^2$ = 7.0, p < 0.01). The anomalies of palmar lines were found in 8 schizophrenic patients (in 6 on the right hand and in 6 on the left hand) and not in control subjects ( $\chi^2$  = 12.2, p < 0.001). The frequency of dermatoglyphic assymetry was similar in schizophrenic and control groups, and among schizophrenic patients, assymetry occurred mostly in paranoid type.

These preliminary observations may suggest some anomalies of dermatoglyphics in schizophrenia, probably due to developmental disturbances during prenatal period.