

Anxiety and depression were measured by the Hospital Anxiety and Depression Scale. Odds ratios for having anxiety or depression were estimated for the TT genotype with the CC + CT genotypes as reference.

**Results:** The MTHFR-TT genotype was associated with a significantly increased risk of depression (OR=1.62 CI: 1.09–2.41), whereas the risk for anxiety was not different from that of the reference group (OR=1.01 CI: 0.74–1.37).

**Conclusion:** Our data support the previous finding that the MTHFR-TT genotype confers increased risk of depression. The lack of association between the MTHFR-TT genotype and anxiety needs to be replicated.

## P22.07

Association between major depressive disorder and a specific haplotype of the CRH binding protein gene

S. Claes<sup>1</sup>\*, J. Del-Favero<sup>1</sup>, D. Souery<sup>2</sup>, J. Mendlewicz<sup>2</sup>, R. Adolfsson<sup>3</sup>, C. Van Broeckhoven<sup>1</sup>. <sup>1</sup>University of Antwerp; <sup>2</sup>Université Libre de Bruxelles, Belgium  
<sup>3</sup>University of Umea, Sweden

Recent research suggests that central CRH hyperdrive is an important neurobiological risk factor for developing major depression. The availability of free CRH in the CNS is tightly regulated by the expression of CRH binding protein (CRHBP). Therefore, the gene encoding for CRHBP is an important functional candidate gene for central CRH hyper drive and for the liability to develop major depression.

We present a systematic study of single nucleotide polymorphisms (SNPs) in the CRHBP gene, and their role in the liability for major depression. Eleven SNPs occurring in the general population were identified, 7 of which were subsequently genotyped in a well diagnosed sample of 92 patients with recurrent major depressions and matched controls. Two SNPs within the CRHBP gene were significantly associated with the disease. An expectation-maximization (EM) algorithm estimating haplotypes combining all 7 SNPs, estimated a specific haplotype to be present in 48% of the patients versus 24% of the controls. This represents a highly significant association. We conclude that the CRHBP gene is likely to be involved in the genetic vulnerability for major depression.

## P22.08

Interleukin-1beta gene promoter polymorphism and risk to functional psychosis

S. Papiol<sup>1</sup>\*, B. Martín<sup>1</sup>, A. Rosa<sup>1</sup>, B. Gutiérrez<sup>1</sup>, P. Salgado<sup>2</sup>, R. Catalán<sup>3</sup>, C. Gastó<sup>3</sup>, L. Fañanás<sup>1</sup>. <sup>1</sup>Universitat de Barcelona, Facultat Biologia. Unitat Antropologia; <sup>2</sup>Inst. Municipal Psiquiatria Urgències (IMPU), Barcelona; <sup>3</sup>CAP Salut Mental Esquerra de l'Eixample, Hospital Clínic de Barcelona, Spain

**Objectives:** Interleukin-1beta is a cytokine implicated both in the inflammatory response and development of central nervous system. Genetic association between interleukin-1beta gene (IL-1B) and schizophrenia has been described in previous studies. However, little is known about the role of this gene conferring risk for other functional psychosis.

**Method:** For this study we examined 88 bipolar patients (DSM-III-R), 73 schizophrenic patients (DSM-IV) and 170 healthy controls, all of them of Spanish origin. The polymorphism Aval (-511), located in the promoter region of IL-1B gene, was analyzed in all subjects and the genotypic and allelic frequencies were calculated for each diagnostic group and controls.

**Results:** A significant excess of allele 1 was detected in schizophrenics compared to controls (P=0.01). Although similar tendencies were found for the total bipolar group, only patients with psychotic symptoms showed significant increase of allele 1 (P=0.01).

**Conclusions:** These results suggest: i) a possible role of allele 1 of IL-1beta gene in the vulnerability to schizophrenia and other functional psychosis and ii) schizophrenia and bipolar disorder could share some genes of risk, as has been suggested in the continuum hypothesis. Acknowledgments: This study was supported by a grant from Fundació "La Caixa" (99-111-000).

## P22.09

Th1 and Th2 relationship in schizophrenia – immunological, immunogenetic and therapeutic investigations

M.J. Schwarz<sup>\*</sup>, M. Riedel, H. Kroenig, S. Sokullu, N. Müller, M. Ackenheil. *Psychiatric Hospital of the LMU, Munich, Germany*

We have hypothesised immunological abnormalities characterised by a decreased Th1 and an increased Th2 immune response in a distinct group of schizophrenic patients. To prove this hypothesis we performed biochemical, immunogenetic, and clinical investigations: Cytokine production by in-vitro stimulated lymphocytes; Molecular genetics of candidate Th1/Th2-related genes: IFN-gamma, IL-4, IL-12, IL-13 (patients/controls n=170 each); Clinical study using a COX2 inhibitor added to an antipsychotic medication (n=50 patients).

Our results suggest a subgroup of schizophrenic patients with reduced IFN-gamma production and increased IL-4/IL-13 production. The IL-13 gene A1082G promotor polymorphism, accompanied with more pronounced Th2 response, was more frequent in patients. Patients receiving the COX2 inhibitor showed a markedly faster reduction of psychotic symptoms, than patients of the placebo group.

Our complex but systematic results may have great impact for the identification of a subgroup of schizophrenia with immune-related pathophysiology and for the development of an immune-mediated therapy strategy in schizophrenia.

## P23. Geropsychiatry

### P23.01

States of loss of sense in late age and their role in creation of lingering depressive responses

Y. Polichtchouk<sup>\*</sup>, I. Baranskaya, Z. Letnikova, A. Kolpakov. *The Moscow Institute of Psychiatry, Russia*

The purpose of the given operation was installation of link between experiences of sense of life and development of lingering depressive disorders in late age. The methods were applied: the special questionnaire, semi-structured interview, psycho biographical method with registration of significant acts of the person during all life, statistical method Fisher. 35 patients of late age (from 62 till 75 years) male and female with presence of experiences of loss of sense of life were researched. As a result of comparative researches is detected, that corrupting of higher personal senses of social and spiritual levels as a result of corrupting former outlook, ideals, loss of the close man, the dismissal with favourite operations result ined to creation of disorders of acclimatization as lingering depressive responses, dysthymias. Being superimposed on the primary psychogenic depressive disorders, which have arisen under influence of a serious stress, the secondary depressive disorders caused by losses

of sense of life, promoted a prolongation and self-development of depressive disorders, at the heart of which there was a loss of higher personal senses and values owing to their objective corrupting. At the analysis of semantic frame of the person has appeared, that the number of the persons with dominance of higher senses of spiritual and social levels authentically predominated in a basic group in comparison with check group, among which the persons with by groupocentric and egocentric senses predominated. The matrimonial ratios for the persons of the first group differed by the greater affection of the spouses to each other, presence of common spiritual interests.

### P23.02

Mortality risk in the octo- and nonagenarians: longitudinal results of an epidemiological follow-up community study

I. Meller\*, M.M. Fichter, H. Schröppel. *Psychiatric-University-Hospital, Munich, Germany*

The object of the study was the assessment of the mortality risk for persons in a representative two-wave community sample assessed longitudinally. In the first cross-section a total of 358 (89.1 %) subjects of Munich, Germany, aged 85 years and above were interviewed by research physicians. Dementia and Depression had the highest prevalence of mental disorder according to the Agecat (automated geriatric examination for computer assisted taxonomy) computer program of the Geriatric Mental State Interview. In all 23.6 % of the interviewees fulfilled criteria for depression, 25.4 % for dementia. One year later 263 (73.5 %) persons were reexamined. Death certificate diagnoses were obtained after an interval of 4 years 8 months. 58 % of the total sample were deceased. Sociodemographic factors, mental disorders, subjective health status, need for care were analysed in relation to mortality by Cox regression. The probability of death was increased in those diagnosed as having a dementia or depressive disorder, in those of increasing age, living in institutions, being in need for care and of bad health status. In the multivariate Cox regression model the influence of these different factors was examined and evaluated. Need for care was the most powerful predictor of mortality.

### P23.03

Psychotic major depression in the elderly and suicidal behaviour

L. Lykouras\*, R. Gournellis, A. Fortos, P. Oulis, G.N. Christodoulou. *Athens University Medical School, Psychiatric Clinic "Eginition" Hospital Psychogeriatric Clinic, "Dromocaition" Mental Hospital, Athens, Greece*

It has been established that depressed patients manifest a higher risk of committing suicide. The role of delusional experiences accompanying depressive symptomatology as a risk factor for suicidal behaviour has been investigated but the results are inconsistent.

In the present study, 40 elderly depressed inpatients with psychotic features (DSM-IV criteria) were compared to 64 elderly depressed patients without such features in terms of suicide attempts.

The results of univariate and multivariate analyses were negative: psychotic and non-psychotic depressed patients did not differ with respect to attempted suicide.

The results of the present study support the notion that psychotic features do not increase the risk for the elderly depressed patients to attempt suicide.

### P23.04

The efficacy of specialised old age psychiatric wards: a multicenter randomised clinical trial

T.T.J. Kircher\*, C. Meisner, F. Schwärzler, G. Buchkremer, H. Wormstall. *Department of Psychiatry, University of Tübingen, Germany*

Psychiatric illness in old age poses particular demands on diagnosis and treatment. We compared the one year clinical outcome of a specialised treatment for old age psychiatric patients. 80 consecutively admitted frail inpatients above age 65 and several functional impairments were randomly assigned to an intervention or control group. The intervention group was diagnosed and treated by a specialised old age psychiatric care team (geriatric psychiatrist, nurse, social worker), the control group on a general psychiatric ward. All patients were assessed at admission and after one year follow up with the Timed Up and Go Test, Tinetti Motility Test, functional impairments, ADL, BPRS, MADRS, GDS, quality of life, sensory status, social situation. All interventions during the inpatient treatment were coded. Outcome variables after one year were mortality, length of in patient treatment during follow up, level of social support. It is hypothesised that a specialised geriatric care team improves the outcome of old age psychiatric patients.

### P23.05

Huntington's Disease: a relevant diagnosis for geriatric patients?

F. Schwärzler\*, H. Wormstall. *Department of Psychiatry, University of Tübingen, Germany*

Huntington's disease (HD) is a fatal neurodegenerative disorder with an autosomal dominant mode of inheritance. It is caused by an increased CAG repeat number in a gene coding for the huntingtin, a protein with unknown function, HD leads to progressive dementia, other psychiatric symptoms and incapacitating choreiform movement disorder, culminating in premature death. Although symptoms of the disease begin commonly between the ages of 35 and 50, we found these patients in services of geriatric psychiatry, commonly due to the psychiatric disturbances like profound dementia.

We present the casuistics of three inpatients treated in our service of geriatric psychiatry. They were characterized by atypical findings: None of them had a family history of HD. The reasons for admission were not cognitive impairment, but depressive symptoms and suicidal behaviour. In conclusion we consider HD as a rare, but relevant diagnosis for geriatric patients not only in the investigation of dementia, but also in atypical depressive syndromes.

### P23.06

Elderly patients with dementia and psychosis treated with risperidone

G. Gharabawi<sup>1</sup>\*, F. Grossman<sup>2</sup>. <sup>1</sup>*Janssen Pharmaceutica Products L.P., USA*

<sup>2</sup>*Janssen Research Foundation, Belgium*

Clinically meaningful psychosis at baseline (a score of 2 on any 1 of the 12 items that measure severity of paranoid and delusional ideation or hallucinations on the Behavioral Pathology in Alzheimer's Disease [BEHAVE-AD]) rating scale was identified in 330 of 625 nursing-home patients with dementia. Placebo was received by 86 of the patients with psychosis and risperidone by 244 (0.5 mg/day by 83, 1.0 mg/day by 76, and 2.0 mg/day by 85). On both the BEHAVE-AD total scale and the psychosis cluster, mean score reductions at endpoint were significantly greater in