FC65-7

TARDIVE DYSKINESIA AND DOPAMINE 3 RECEPTOR GENE MUTATION

Harald N. Aschauer[1]*, J. Scharfetter[1], K. Fuchs[2], E. Gerhard[2], C. Gebhardt[1], E. Lenzinger[1], K. Meszaros[1], K. Hornik[3], W. Sieghart[2], S. Kasper[1]. *[1]Department of General Psychiatry; [2]Division for Biochemical Psychiatry, University Hospital for Psychiatry, 1090 Vienna; [3]Department of Statistics and Probability Theory, University of Technology, Vienna, Austria*

Genetic variability of neurotransmitter receptor genes is hypothesized to play an important role for interindividual differences in treatment response and side effects. The presence of tardive dyskinesia was found to be associated with a specific dopamine D3 receptor gene (DRD3) polymorphism (Ser9Cys substitution).

We set out to test this finding in a sample of schizophrenic patients treated chronically with neuroleptic drugs. After giving written informed consent a structured psychiatric interview was made, applying the Schedule for Affective Disorders and Schizophrenia, lifetime version (SADS-L). A consensus diagnosis blind to the identity of the patients was performed. More than 50 patients who met the DSM-III-R diagnostic criteria for schizophrenia were selected. The DRD3 Ser9Cys polymorphism was genotyped with polymerase chain reaction (PCR). Patients were rated for tardive dyskinesia using the Tardive Dyskinesia Rating Scale. The diagnosis of stable tardive dyskinesia was established following the research criteria for tardive dyskinesia.

The results did not show an association between tardive dyskinesia and DRD3 genotype, as well as tardive dyskinesia with allele 1 oder allele 2 of the DRD3 mutation.

Our results do not replicate an earlier report in the literature. Because this study was a retrospective pilot study we are preparing now a prospectivly designed study investigating possible molecular genetic contributions in the development of tardive dyskinesia.

FC65-8

THERAPEUTIC DRUG MONITORING ROUTINE IN GENERAL PSYCHIATRY

J.A.J. Boermans[1], S. Tuinier[1], W.M.A. Verhoeven[1]*, J.B.G.M. Noten[2], T.M. Jagmont[2], Y.W.M.M. Van den Berg[1]. *[1]Vincent van Gogh Institute for Psychiatry, Venray, 5800 AA; [2]ZALV Pharmaceutical Laboratories, Venray, 5800 AA, The Netherlands*

In man a great inter-individual variability exists in the oxidative capacity to metabolize drugs. A major factor contributing to this phenomenon, is the genetically determined hydroxylation capacity of the cytochrome P450 enzyme system, comprising several isozymes. In this respect, a bimodal clearence distribution has been demonstrated indicating subjects with poor and extensive metabolization rates.

Applying standard dosing schemes of compounds that are predominantly metabolized by these isozymes, a considerable number of patients will be intoxicated because of poor metabolism. Henceforth, cytochrome P450 isozymes are likely targets for pharmacokinetic interactions.

In order to estimate inter- and intrapatient serum concentration variance and hence clearence as a function of metabolic rate, sex, age and comedication in a clinical setting, the total database of our pharmaceutical laboratories over the past five years was evaluated with special reference to: clozapine and SSRI's, TCA's and neuroleptics, monotherapy with SSRI's and ratio's between parent compound and metabolites.

It was found that plasmalevels of clozapine increase substantially by concomitant use of SSRI's, that adding low potency neuroleptics like thioridazine and levomepromazine to the TCA's clomipramine and amitriptyline induces disturbances in biotransformation of both classes of compounds and that the E-hydroxymetabolite of nortriptyline may contribute significantly to the antidepressant efficacy.

It is concluded that routine therapeutic drug monitoring is mandatory not only to reduce toxicity, but also to enhance efficacy and to disclose unexpected abnormalities in biotransformation.

FC66. OCD and eating disorders: biology and epidemiology

Chairs: P Munk-Jørgensen (DK), G Bersani (I)

FC66-1

AUDITORY EVENT RELATED POTENTIALS AND OBSESSIVE COMPULSIVE SYMPTOMS

G. Bersani*, T. Arcangeli, P. Venturi, A. Valchera, I. Taddei. *Department of Psychiatry Science and Psychological Medicine University of Rome "La Sapienza", Italy*

There are few studies in literature about the use of event-related potentials in OCD. The previous studies are often not comparable, as regards methodology, and incomplete or contraddictory in the results. Aim of the study was to investigate a possible relationship between the severity of OC symptoms measured by Y-BOCS (Yale Brown Obsessive Compulsive Scale) and EP (Evoked Potentials) latencies and amplitudes.

We examined 8 male patients (mean age 31.62 ± 13.76 SD) meeting DSM IV diagnostic criteria for OCD, by measuring auditory event-related potentials (ERPs) during a selective attention task.

Event-related potentials were measured in an auditory "oddball" task. We examined N1, N2, P2, and P3 amplitudes and latencies recorded after binaural click stimulation. The evaluation of OC symptomatology was performed by Y-BOCS.

OC subjects were found to have a significantly negative correlation between latencies on N1 ($p < 0.01$), N2 ($p < 0.01$), P2 ($p < 0.002$) and P3 ($p < 0.005$) of the AEP (Auditory Evoked Potentials) and the Y-BOCS item score "time spent on compulsions".

The results are consistent with the current neurobiological models of OCD. The model of an overactive cortical-striatal-thalamic-cortical circuit was proposed in the OCD pathophysiology after the findings by functional neuroimaging. This hypothesis could be confirmed by electrophysiological data. These are the first data about the clinical dimensional aspect of this pathology related to the electrophysiological level, leading to an indirect confirm of the neuroanatomic results.

This study was supported by CNR Grant (MRI-Project years 95–97).

FC66-2

EPIDEMIOLOGY OF OBSESSIVE-COMPULSIVE DISORDER IN YOUNG ADOLESCENTS — A POLISH PERSPECTIVE

A. Bryńska, T. Wolańczyk*, B. Goszczyńska. *Department of Child Psychiatry, Warsaw Medical Academy, 00-576 Warszawa, Poland*

Obsessive Compulsive Disorder (OCD) in childhood and adolescence has been considered a rare and maybe underdiagnosed

condition. There are few systematic studies in nonclinical child and adolescents population. On the basis of these epidemiological data it is concluded that OCD is far more common then was previously believed. However, good epidemiological studies in other parts of the world than the US are still needed.

Objective: To investigate the frequency of OCD and subclinical OCD in polish young adolescents.

Method: During a two-stage epidemiological study, a total number of 2884 pupils in Warsaw (Poland), aged 12–16 years completed the Leyton Obsessional Inventory-Child Version, consisting of 20 items. In the diagnostic stage the author's questionnaire based on DSM-IV diagnostic criteria for OCD and the Children's Yale-Brown Obsessive Compulsive Scale (CY-BOCS) were administrated to 96 subjects reflecting possible subclinical or clinical OCD and 52 subjects from control cohort.

Results: The prevalence of OCD and subclinical OCD were found to be 0.38% and 2%, respectively.

Conclusion: Findings suggest that obsessions, compulsions and OCD are not infrequent among young adolescents and the disorder usually is not seen or recognized by health care professionals.

FC66-3

HALLUCINATORY PHENOMENA IN EATING DISORDERS: FUNCTION AND SIGNIFICANCE

K. Moscianese*, S. Filesi, A. Ciocca[1]. [1]*Institute of Psychiatry and Psychology; Catholic University of Sacred Heart School of Medicine, Rome, Italy*

By reporting some clinical cases we will attempt to analyze the function and importance that hallucinations play in anorexic and bulimic patients.

The defensive purpose against emotions of these psychopathologic symptoms becomes indeed obvious when they are going to be solved.

In clinical experience we found that hallucination and delirium, even if they are often hidden or confined to "body" and "food" territories, are always present among the symptoms in patients with eating disorders. Their range is extremely rich, ranging from negative hallucination to the appearance of monsters and goblins. In these pathologies, such phenomenology, often underestimated because usually not much evident, makes the border classically drawn between psychosis and neurosis useless, and if outlined and "understood" by the therapist, may lead to interesting developments in the treatment of these patients.

FC66-4

ALTERATIONS OF AUTONOMIC CARDIAC CONTROL IN ANOREXIA NERVOSA

T. Rechlin. *Zentrum für Psychiatrie Weinsberg, Germany*

Background: The author investigated autonomic cardiac function in anorexia nervosa.

Methods: Forty-eight patients, who in the present or past met the DSM-III-R criteria for anorexia nervosa, and sixteen normal control subjects participated in a standardized analysis of heart rate variability (HRV) during supine and standing postures.

Results: Several HRV-parameters showed an inverse correlation to the present weight of the anorexic subjects. The values of the spectral power analyses were significantly ($p < 0.01$) lower in patients ($n = 18$) weighing less than 75% of ideal weight when compared to the control group; however, the heart rate variability parameters of anorexic patients with restored weight ($n = 12$) did not differ from those of the control subjects.

Conclusions: The obtained results provide evidence for autonomic cardiac dysfunction in acutely ill anorexic patients. The significance of these findings are threefold. First, there is an increasing evidence that alterations of the autonomic control should be considered as a risk factor for deleterious complications of the heart. Therefore, HRV-analysis is supposed to be a useful tool in monitoring the health of patients with anorexia nervosa. Second, in future studies it may be profitable to investigate whether anorexic patients with rigid cardiac autonomic nervous system function show a different treatment response to psychotropic as well as to psychotherapeutic methods than patients with intact autonomic regulation. Third, the strong influence of weight on the results of power spectral analysis deserves attention when investigating HRV in other psychiatric diseases, e.g., in depression and anxiety disorders.

FC66-5

BONE MINERAL DENSITY IN ADOLESCENT GIRLS WITH ANOREXIA NERVOSA

G. Jagielska[1], C. Tomaszewicz-Libudzic[1], J. Komender[1], T. Wolańczyk[1]*, J. Przedlacki[2], K. Ostrowski[2]. [1]*Department of Child Psychiatry, Warsaw Medical Academy, 00-576 Warszawa;* [2]*Department of Internal Medicine and Nephrology, Warsaw Medical Academy, 02-097 Warszawa, Poland*

Osteoporosis is one of the physical complications of anorexia nervosa (a.n.). In order to determine the prevalence of osteoporosis in adolescent patient with a.n. and possible contributing factors the bone mineral density (BMD) were measured in cross-sectional and longitudinal studies.

Material: BMD of the lumbar spine (L2–L4) and the whole body (BMD-total) and body fat (%FAT) were measured during the first month of hospitalization in 49 a. n. girls aged 10.8 to 22.25 y (mean age 12.7). All patient met DSM-IIIR criteria for a.n.. 25 patients returned for a follow-up examination after approx. a year (mean 12, 7 months) and 12 patients again after approx. 2 years (mean 25 months).

Method: The BMD was measured by dual-energy X-ray absortiometry (using densitometer DPX-L Lunar). The values of BMD were expressed as BMD (g/cm2) which is calculated by diving the bone mineral content by the projected bone width and Z-score below or above mean BMD for age. The correlation between BMD and clinical data (duration of illness, duration of amenorrhea, body mass index, % standard body weight, activity level, %FAT) were analyzed using Spearman's correlation coefficients. Differences between groups were analyzed using one way-ANOVA.

Results: 1) Low BMD occurs early in the course of the a.n.. 2) There were negative correlations between BMD and the duration of illness and the degree of undernutrition. 3) There was no correlation between BMD and duration of amenorrhea in patients with secondary amenorrhea. 4) The patients with primary amenorrhea had significantly lower BMD (3rd examination) than those with secondary amenorrhea.

FC66-6

PREVALENCE OF BULIMIA NERVOSA IN MIDDLE ADOLESCENCE

Riittakerttu Kaltiala-Heino[1]*, Aila Rissanen[2], Päivi Rantanen[1], Matti Rimpelä[3]. [1]*University of Tampere, Tampere School of Public Health;* [2]*Helsinki University Hospital;* [3]*National Development and Research Center for Health and Welfare, Finland*

Studies of prevalence of bulimia nervosa have focused on female population from their late teens. The aim of this study is to assess

https://doi.org/10.1016/S0924-9338(99)80293-4 Published online by Cambridge University Press