

prevent them from all unpleasant feelings, or rejecting parents. They grew up in an extremely anxious and aggressive family atmosphere. The parents themselves were not separated from their own families and did not enable their children to separate from the parents or to develop their own identity. Without the possibility to separate from the primary group and to work through the traumata transmitted from the parents the children will mostly suffer from psychoses, dissociative emotional patterns, or psychosomatic disorders.

**Methods:** The research project was evaluated with qualitative methods, that means with biographical interviews and with circular deconstruction.

**Results:** The unsolved and untreated traumata experiences of parents and grandparents are transmitted through aggression and extreme anxieties towards the family and the patients.

**Conclusion:** Through this investigation there is a possibility to understand the social and family background and the input on the patient which has implications for the treatment approach.

Wednesday, April 6, 2005

## P-18. Poster session: Psychotic disorders IV

*Chairperson(s):* Julio Bobes Garcia (Oviedo, Spain), Angela Naderi-Heiden (Wien, Austria), Celso Arango (Madrid, Spain)

11.15 - 12.15, Gasteig - Foyers

### P-18-01

Psychopharmacological treatment of acutely agitated patients in an intensive care unit

A. Naderi-Heiden, R. Wimmer, R. Frey, S. Kasper. *Medical Univ of Vienna General Psychiatry, Wien, Austria*

**Objective:** Intensive treatment is required to manage agitated patients.

**Methods:** In 2002 twelve patients suffering from severe, therapy-resistant agitation (ICD10 F31.2, F20.0, F25.0) were transferred from general psychiatric facilities (GPCU) in the area of Vienna to the psychiatric intensive care unit (PICU) of the Vienna Medical University of Psychiatry, Department of General Psychiatry. In this retrospective analysis the psychotropic prescription patterns for PICU patients was compared to the prescriptions patterns for 12 severely ill GPCU patients of the same sex, age and diagnosis at the third day of admission.

**Results:** Total chlorpromazine equivalent dosage was lower in the PICU group than in the GPCU group (PICU:  $575 \pm 303$  mg; GPCU:  $850 \pm 488$  mg;  $p=ns$ ). Chlorpromazine equivalent dosage of typical neuroleptics was significantly lower in the PICU group than in the GPCU group ( $p<0.05$ ). Multiple antipsychotic prescribing occurred more frequently in the GPCU group than in the PICU group (8 versus 4). No low-potency neuroleptics were applied in patients of the PICU. Total diazepam equivalent dosage was similar in both groups (PICU:  $50 \pm 51$  mg; GPCU:  $55 \pm 24$  mg;  $p=ns$ ). Concomitant psychotropic treatment consisted of valproate and lithium. Moreover, nalbuphine 10-20 mg s.c. was used in case of severe insomnia in PICU patients.

**Conclusion:** In conclusion, the PICU does not administer high-dose therapy (as compared to GPCU), and does not prescribe high

dosage of typical neuroleptics, but offers treatment based on high staff levels, monitoring (including checks of nutrient and fluid balance) and physical restraints for safety reasons.

### P-18-02

Assessment of dependence between therapy with neuroleptics and incidence of symptoms of the restless legs syndrome

A. Nitka-Sieminska, M. Sieminski, J. Landowski, W. M. Nyka. *Medical University of Gdansk Dept. of Mental Disorders, Gdansk, Poland*

**Objective:** The aim of this study was to assess whether there is a relationship between intake of neuroleptic drugs and incidence of the restless legs syndrome (RLS).

**Methods:** An original questionnaire based upon diagnostic criteria of the RLS created by International Restless Legs Syndrome Study Group was used in this study. The questionnaire contained also questions about supportive clinical features of RLS, demographic features of the patients and their health status. The questionnaires were filled in by the patients during their stay in the Department of Mental Disorders. The data about the patients' diagnosis and therapy were then collected. Patients participated in the study by their own will.

**Results:** We have examined 111 patients from Department of Mental Disorders of Medical University of Gdańsk (71 females and 40 males). The mean age of the examined group was 44,9 years. Most patients were suffering from following diseases: schizophrenia, depression, anxiety disorders and bipolar disorder. Forty-eight patients (43.2%) were treated with neuroleptics. In the group of patients taking neuroleptics we have found 16 subjects with symptoms of the restless legs syndrome (33.3%). The incidence of restless legs syndrome in the group of patients not treated with neuroleptics was lower – we have found 12 patients with symptoms of RLS in this group (19%).

**Conclusion:** The incidence of symptoms of restless legs syndrome in the group of patients taking neuroleptics was higher than in the population of patients treated with another drugs. Establishing a correlation between intake of specific neuroleptics and incidence of RLS needs further studies with larger groups of patients.

### P-18-03

Measurement of vigilance and performance in a real-car based driving-simulator: Applications in psychiatry

R. Mager, F. Müller-Spahn, A. H. Bullinger, R. Störmer. *Center of Applied Technologies, Basel, Switzerland*

**Objective:** The goal of the present study was to evaluate physiological measures and objective performance parameters during driving in a real-car based driving simulator. Arousing auditory stimuli were applied to compare data prior and after intervention to test the sensitivity of the system.

**Methods:** Overall 41 subjects were selected matched for age and driving experience. To create realistic traffic scenarios in a laboratory environment a passenger car simulator was used emulating the functionality of a modern car. Electroencephalographic (EEG) activity, skin conductance, respiratory and cardiac parameters were continuously recorded during driving. Analysis was focused on time intervals prior and after application of a warning stimulus intervening a monotonous driving session. Simultaneously objective driving-

parameters were derived from the simulator (time to lane crossing, lateral position and others).

**Results:** The intervening stimuli induced significant group effects in respect to EEG activity and skin conductance. There was a decline of the stimulus induced changes within several minutes. Other physiological parameters like respiratory or cardiac parameters were unaffected. Data revealed a strong inter-individual variability. This applied also to the performance parameters provided by the simulator. Time to lane crossing and the lateral position of the car were determined in different scenarios and separated for various types of tracks.

**Conclusion:** The present study revealed significant physiological group effects in response to intervening stimuli during driving in a real-car based simulator. EEG effects, simulator data and first applications in psychiatry are discussed.

### P-18-04

#### Topiramate in smoking cessation

Y. Khazaal, E. Frésard, M. Stankovic, A. Buecking, F. Borgeat, D. F. Zullino. *University of Lausanne Department of Psychiatry, Prilly-Lausanne, Switzerland*

**Objective:** Important data supports a role of glutamatergic mechanisms in synaptic plasticity and long-term behavioral adaptations, such as those found in substance abuse. Experiments on behavioral sensitization indicate that whereas NMDA-receptors are involved in the induction, AMPA-receptors may mediate the expression of the established response. The anticonvulsant topiramate is, among others, an AMPA antagonist, and may become therefore an interesting treatment strategy in substance abuse. The objective of the present study was to explore the efficiency of topiramate in smoking cessation.

**Methods:** Thirteen smokers were included in this observational study, all of them having a history of at least 2 failed previous cessation attempts with nicotine substitution. Topiramate was initiated at 25mg and augmented depending on individual tolerance. The final dose range was 50-800mg, the higher doses being well tolerated by the smokers receiving them.

**Results:** Seven subjects achieved abstinence within 28 days and were still abstinent at week 12. Five further subjects reduced smoking under topiramate, but 3 of them interrupted the treatment within 4 weeks because of intolerable neurological side effects. One further participant stopped treatment due to side effects without having modified his tobacco consumption.

**Conclusion:** The present results suggest a rapid effect of topiramate on smoking behavior in those patients tolerating the drug, with subsequent smoking cessation within 4 weeks. Despite very prudent dose titration, some smokers may, however, not benefit from topiramate due to side effects.

### P-18-05

Waist circumference as an index of obesity in psychiatric patients: results from the cross-sectional clamors study

J. Bobes Garcia, J. Bobes, C. Arango, R. Carmena, P. Aranda, M. Garcia-Garcia, J. Rejas. *University of Oviedo Med. Dept. Psychiatry Area, Oviedo, Spain*

**Objective:** To assess the frequency of obesity in a Spanish population treated with atypical antipsychotics and haloperidol.

**Methods:** A retrospective, cross-sectional, multicenter study was carried out by 49 Spanish Psychiatrists (The CLAMORS-Collaborative-Group). 517 evaluable, consecutive outpatients meeting DSM-IV criteria for Schizophrenia, Schizophreniform or Schizoaffective Disorder, and treated with haloperidol (H) (n=84), amisulpiride (A) (n=78), olanzapine (O) (n=106), quetiapine (Q) (n=79), risperidone (R) (n=81) and ziprasidone (Z) (n=89) for at least 12 weeks, were recruited. Obesity was defined as waist circumference >102 (men) or >88 (women) cm.

**Results:** The average doses of antipsychotics were: 10.7mg/d(H), 51.03mg/d(A), 15.1mg/d(O), 468.0mg/d(Q), 6.1mg/d(R) and 126.0mg/d(Z). Out of 446 patients, 192 (43.0%) were obese. The treatments with the highest number of patients with obesity were quetiapine (52.2%) and amisulpiride (51.5%) followed by risperidone (46.4%), haloperidol (39.7%), olanzapine (38.9%) and ziprasidone (32.9%) (Chi-square test:  $p < 0.05$  for amisulpiride and risperidone versus ziprasidone). A higher risk of obesity was seen with quetiapine (OR: 1.7[CI95%:0.9-3.2]) and amisulpiride (OR: 1.6[0.8-3.2]) versus haloperidol, followed by risperidone (OR: 1.3[0.7-2.6]), olanzapine (OR: 1.0[0.5-1.8]) and ziprasidone (OR: 0.7[0.4-1.4]). Nevertheless, treatment with amisulpiride, olanzapine, quetiapine, risperidone and ziprasidone were not identified as statistically significant risk factors of obesity versus haloperidol.

**Conclusion:** Obesity frequency was different according to type of therapy, showing that with ziprasidone there was a lower frequency of obesity ( $p < 0.05$ ) than with amisulpiride and quetiapine. Statistically significant differences were not found with the remaining treatments. On behalf of the CLAMORS Study Group

### P-18-06

Registered Diabetes and Glucose Intolerance in Psychotics According to Type of Therapy: Results from the Cross-Sectional Clamors Study

J. Bobes Garcia, J. Bobes, C. Arango, R. Carmena, P. Aranda, M. Garcia-Garcia, J. Rejas. *University of Oviedo Med. Dept. Psychiatry Area, Oviedo, Spain*

**Objective:** To assess the frequency of diabetes in a Spanish Schizophrenic population treated with atypical antipsychotics and haloperidol.

**Methods:** A retrospective, cross-sectional, multicenter study was carried out by 49 Spanish Psychiatrists (The CLAMORS-Collaborative-Group). 517 evaluable, consecutive outpatients meeting DSM-IV criteria for Schizophrenia, Schizophreniform or Schizoaffective Disorder, and treated with haloperidol (H) (n=84), amisulpiride (A) (n=78), olanzapine (O) (n=106), quetiapine (Q) (n=79), risperidone (R) (n=81) and ziprasidone (Z) (n=89) for at least 12 weeks, were recruited. Prevalence of diabetes including diabetes type I/II and glucose intolerance (glucose  $\geq 110$ mg/dL) was estimated.

**Results:** The average doses of antipsychotics were: 10.7mg/d(H), 51.03mg/d(A), 15.1mg/d(O), 468.0mg/d(Q), 6.1mg/d(R) and 126.0mg/d(Z). Out of 517 patients, 79 (15.3%) showed diabetes. The treatment with the highest number of patients with glucose intolerance was olanzapine (21.0%), followed by risperidone (13.9%) ziprasidone (13.8%), quetiapine (13.2%), amisulpiride (10.4%), and haloperidol (9.6%) (Chi-square test:  $p < 0.05$  for olanzapine versus haloperidol). The treatment with the highest

number of patients with diabetes was olanzapine (20.8%), followed by ziprasidone (16.9%), risperidone (14.8%), amisulpiride (14.1%), quetiapine (13.9%), and haloperidol (9.5%) (Chi-square test:  $p < 0.05$  for olanzapine versus haloperidol). Risk of diabetes for olanzapine (OR:2.5[1.0-5.9]) versus haloperidol was higher than for ziprasidone (OR:1.9[0.8-4.8]), risperidone (OR:1.7[0.6-4.3]), amisulpiride (OR:1.6[0.6-4.1]) and quetiapine (OR:1.5[0.6-4.0]).

**Conclusion:** Diabetes frequency was different according to type of therapy, showing that with olanzapine there was a higher prevalence of diabetes than with haloperidol, and to a lesser extent, not reaching statistical significance, than with ziprasidone, risperidone, amisulpiride and quetiapine. On behalf of the CLAMORS Study Group

### P-18-07

Persistency and Compliance Evaluation (PACE): Germany population with schizophrenia or bipolar disorder analysis of persistency with initially prescribed antipsychotics

R. Simons. *Global Health Economics, Summit, USA*

**Objective:** Assess and compare the rate of persistency with initially prescribed antipsychotic medication for patients with schizophrenia or bipolar disorder treated with quetiapine, risperidone, haloperidol, olanzapine or a composite of risperidone, olanzapine or clozapine. Adding, switching and discontinuation rates are also compared.

**Methods:** We use longitudinal data obtained from IMS Mediplus Germany from 1998 - 2004. All quetiapine patients are initially identified with their start-date as their first prescription. Patients from comparators were randomly selected to match the distribution of quetiapine start dates to avoid late entrance bias. Rates of persistency were measured at 6, 9 and 12 months. Cox proportional hazard models were used for time on monotherapy.

**Results:** 475 quetiapine patients were identified with schizophrenia or bipolar disorder diagnoses and 467 for risperidone patients, 387 haloperidol patients, and 416 olanzapine patients and 1031 in the composite group. For primary endpoints of persistency, adding, switching and discontinuing, at 1-year, 30.51% of quetiapine patients remained on treatment compared to 24.10% for risperidone ( $p=0.04$ ), 16.72% for haloperidol ( $p<0.01$ ), 21.19% for olanzapine ( $p<0.01$ ) and 25.28% for the composite group ( $p=0.05$ ). At 6-months 47.69% of quetiapine patients remained on treatment compared to 41.03% ( $p=0.06$ ), 26.14% ( $p<0.01$ ), 35.88% ( $p<0.01$ ) and 40.14% ( $p=0.01$ ), respectively. From Kaplan-Meier plots for the time on monotherapy, patients initiated on quetiapine remained on treatment for 124 days compared to 100 days ( $p=0.003$ ), 50 days ( $p<0.001$ ), 91 days ( $p<0.001$ ) and 99 days ( $p=0.002$ ).

**Conclusion:** While overall 1-year persistency is low, patients initiated on quetiapine remain on prescribed medication significantly longer.

### P-18-08

The influence of patients' and doctors' social characteristics on the selection of treatment strategies for schizophrenia in Germany

M. Franz, J. Ranger, M. Matheis, B. Gallhofer. *Universitätsklinikum Gießen Zentrum für Psychiatrie, Gießen, Germany*

**Objective:** The analysis of medical decision making is an important issue in the quality assurance of psychiatric care. We therefore investigated the influence of the patients' compliance and

socio-economical status as well as characteristics of the prescribing psychiatrists on their selection of four general antipsychotic treatment strategies of schizophrenia (typical versus atypical, oral versus depot antipsychotics).

**Methods:** We conducted a postal survey among psychiatrists in Germany (response rate  $N=1342$ ). The influence of the socio-economic status and compliance on antipsychotic drug prescription was investigated by means of case vignettes that were part of a larger questionnaire. Case profiles were constructed by orthogonal variation of status and compliance. Psychopathology was identical for all vignettes. The effect of compliance and socio-economic status on the decisions of the physicians between the four aforementioned treatment strategies was estimated by weighted linear models.

**Results:** Statistical analysis revealed interacting effects of compliance and socio-economic status on the treatment selection for the different case vignettes. Low compliance led to an increase of depot usage. In case of high compliance, low status was associated with an increase in the selection of conventional oral antipsychotics at cost of atypical oral antipsychotics. In case of low compliance, low status caused an increase in selections of conventional depot antipsychotics and further reduced atypical oral antipsychotic usage. Further effects of age and gender of the physicians were found.

**Conclusion:** Therapeutic decisions seem to be influenced by patient characteristics. Barriers to newer medication may exist for people with low compliance and low socio-economic status.

### P-18-09

Longer time to all-cause antipsychotic discontinuation is associated with better schizophrenia treatment outcomes

E. Dunayevich, F. Zhao, H. Ascher-Svanum, C. Mitchell, G. Phillips, M. A. Dellva, A. Green. *Eli Lilly and Company, Indianapolis, USA*

**Objective:** To assess whether longer time to all-cause discontinuation of antipsychotic medications in clinical trials is associated with better outcomes in the treatment of schizophrenia.

**Methods:** Data were pooled from 6 longer-term ( $\geq 24$  weeks), double-blind, randomized studies comparing olanzapine with haloperidol, risperidone, quetiapine, or ziprasidone in the treatment of patients with schizophrenia-spectrum disorders. Post-hoc, Pearson partial correlations were used to assess the relationships between duration of trial participation and changes in symptoms (Positive and Negative Syndrome Scale, PANSS) and health-related quality of life (e.g., Medical Outcomes Study 36-Item Short Form Health Survey, SF-36; Heinrichs-Carpenter Quality of Life Scale, QLS), adjusting for baseline outcome measure scores. Outcome measures were also contrasted between patients who completed their study and patients who did not.

**Results:** Longer antipsychotic trial participation was significantly associated with greater improvements on the SF-36 component summaries and all subscales ( $r=0.08$  to  $0.28$ ,  $p<0.005$ ), the QLS total and all subscales ( $r=0.19$  to  $0.31$ ,  $p<0.0001$ ), and PANSS total, positive, and negative scores ( $r=-0.42$  to  $-0.52$ ,  $p<0.001$ ). Completers showed significantly greater improvements than non-completers on several outcome measures, including SF-36. Mental Component Summary, QLS instrumental role, and PANSS total scores.

**Conclusion:** During clinical trials of antipsychotic treatments for patients with schizophrenia-spectrum disorders, longer time to all-cause trial discontinuation appears to be associated with



significantly greater improvements in health-related quality of life and clinical symptomatology.

### P-18-10

Overall treatment effectiveness as measured by time continuing on antipsychotic therapy

C. Beasley, V. Stauffer, C. Mitchell, H. Liu-Seifert, J. Davis, E. Dunayevich. *Eli Lilly and Company, Indianapolis, USA*

**Objective:** To examine continuation on therapy in double-blind, randomized studies of olanzapine versus other antipsychotic treatments.

**Methods:** Seventeen studies met the following inclusion criteria:  $\geq 12$  weeks duration;  $\geq 20$  patients/arm; double-blind randomized treatment assignment; no protocol-specified definition for mandatory discontinuation prior to 12 weeks; diagnosis: schizophrenia, schizophreniform, or schizoaffective disorders. Weighted mean hazard ratios (HRs) and 95% confidence intervals (CIs) were calculated based on the continuation time in the studies (greater HRs indicate greater risk of discontinuation on the comparator relative to olanzapine). When  $\geq 2$  studies met inclusion criteria for a comparator, a meta-analysis was conducted. [numbers of these studies and combined N's: 5, olanzapine (n=537) vs. haloperidol (n=439); 5, olanzapine (n=421) vs. risperidone (n=426); 2, olanzapine (n=550) vs. ziprasidone (n=525); 3, olanzapine (n=201) vs. clozapine (n=202)]. When only one study met inclusion criteria for a comparator, it was analyzed separately: [olanzapine (n=30) vs. fluphenazine (n=30); olanzapine (n=23) vs. perphenazine (n=23); olanzapine (n=139) vs. amisulpride (n=70); olanzapine (n=171) vs. quetiapine (n=175)].

**Results:** HRs (CIs) for comparators included in meta-analyses relative to olanzapine were: haloperidol=1.4 (1.2-1.7) ( $p < 0.0001$ ); clozapine=1.2 (0.9-1.6) ( $p = 0.312$ ); risperidone=1.3 (1.1-1.6) ( $p = 0.0047$ ); ziprasidone=1.6 (1.4-2.0) ( $p < 0.0001$ ). HRs (CIs) for single-study comparators versus olanzapine were: fluphenazine=1.82 (0.78-4.27) ( $p = 0.169$ ); perphenazine=1.06 (0.47-2.42) ( $p = 0.88$ ); amisulpride=1.10 (0.77-1.57) ( $p = 0.60$ ); and quetiapine=1.41 (1.06-1.89) ( $p = 0.02$ ).

**Conclusion:** Treatment continuation appears significantly longer with olanzapine than haloperidol, risperidone, ziprasidone, and quetiapine, but not clozapine. The single study nature and small sample sizes of the fluphenazine, perphenazine, and amisulpride comparator studies preclude interpretation of the results.

### P-18-11

Coronary Heart Disease (CHD) And Mortality Risk In Psychotic Patients Treated With Different Antipsychotics: Results From The Cross-Sectional Clamors Study

C. Arango, J. Bobes, P. Aranda, R. Carmena, M. Garcia-Garcia, J. Rejas. *Gregorio Maranon Univ. Hospital Psychiatry Dept. Madrid, Spain*

**Objective:** To assess CHD and mortality risk according to SCORE equation and ATP-III in a Spanish population treated with atypical antipsychotics and haloperidol.

**Methods:** A retrospective, cross-sectional, multicenter study was carried out by 49 Spanish Psychiatrists (The CLAMORS-Collaborative-Group). 517 evaluable, consecutive outpatients meeting DSM-IV criteria for Schizophrenia, Schizophreniform or Schizoaffective Disorder, and treated with haloperidol(H) (n=84),

amisulpride(A) (n=78), olanzapine(O) (n=106), quetiapine(Q) (n=79), risperidone(R) (n=81) and ziprasidone(Z) (n=89) for at least 12 weeks, were recruited. Risk of CHD was estimated, according to SCORE and defined according to ATP-III classification as very-high/moderate and low.

**Results:** The average doses of antipsychotics were: 10.7mg/d(H), 510.3mg/d(A), 15.1mg/d(O), 468.0mg/d(Q), 6.1mg/d(R) and 126.0mg/d(Z). The average SCORE were 1.4(H), 1.1(A), 1.0(O), 0.8(Q), 0.7(R) and 0.5(Z). According to ATP-III, the treatments with the highest number of patients with very-high/moderate risk of CHD were olanzapine (51.9%) and haloperidol (51.2%), followed by risperidone (48.1%), amisulpride (46.2%) quetiapine (44.3%) and ziprasidone (36.0%) (Chi-square test:  $p < 0.05$  for olanzapine and haloperidol versus ziprasidone). A higher risk of hyperlipidemia was seen with olanzapine (OR:1.9[CI95%:1.1-3.5]) and with haloperidol (OR:1.9[CI95%:1.0-3.6]) versus ziprasidone, followed by risperidone (OR:1.3[CI95%:0.7-2.5]), amisulpride (OR:1.0[CI95%:0.5-2.0]) and quetiapine (OR:0.8[CI95%:0.4-1.6]). A higher risk of high PAD ( $\geq 90$  or  $\geq 80$  if diabetes/renal/CHD) was seen with haloperidol (OR:2.4[CI95%:1.2-5.0]) versus ziprasidone, followed by olanzapine (OR:1.7[CI95%:0.8-3.5]), amisulpride (OR:1.4[CI95%:0.6-3.1]) and quetiapine and risperidone (OR:1.4[CI95%:0.6-3.0]).

**Conclusion:** The risk of CHD was different according to type of therapy, showing that with ziprasidone there was a lower risk of CHD than with olanzapine and haloperidol. On behalf of the CLAMORS Study Group

### P-18-12

Metabolic syndrome in psychotic patients: Results from the cross-sectional Clamors Study

C. Arango, C. Arango, J. Bobes, P. Aranda, R. Carmena, M. Garcia-Garcia, J. Rejas. *Gregorio Maranon Univ. Hospital Psychiatry Dept. Madrid, Spain*

**Objective:** To assess the frequency of Metabolic Syndrome (MS) in a Spanish population treated with atypical antipsychotics and haloperidol.

**Methods:** A retrospective, cross-sectional, multicenter study was carried out by 49 Spanish Psychiatrists (The CLAMORS-Collaborative-Group). 517 evaluable, consecutive outpatients meeting DSM-IV criteria for Schizophrenia, Schizophreniform or Schizoaffective Disorder, and treated with haloperidol (H) (n=84), amisulpride (A) (n=78), olanzapine (O) (n=106), quetiapine (Q) (n=79), risperidone (R) (n=81) and ziprasidone (Z) (n=89) for at least 12 weeks, were recruited. MS was defined as fulfilment of at least 3 of the following components: waist circumference  $> 102$ (men) /  $> 88$  (women)cm; tryglicerides  $\geq 150$ mg/dL; HDL-cholesterol  $< 40$ mg/dL(men) /  $< 50$ mg/dL (women); blood pressure  $\geq 130/85$ ; glucose  $\geq 110$ mg/dL.

**Results:** Out of 516 patients, 137 (26.5%) showed MS and 260 (50.4%) at least 2 components. The treatment with the highest number of patients with MS was olanzapine (31.1%) followed by quetiapine (30.4%), risperidone (25.9%), amisulpride (24.7%), ziprasidone (23.6%) and haloperidol (22.6%). Quetiapine (54.4%), olanzapine (53.8%) and haloperidol (53.6%) showed more patients with at least 2 components than ziprasidone (38.2%) (Chi-square-test:  $p < 0.05$ ). A higher risk of hypertrygliceridemia was seen with olanzapine (OR:2.2[CI95%:1.2-4.1]) and with risperidone (OR:2.1[CI95%:1.1-4.0]) versus ziprasidone, followed by haloperidol (OR:1.6[CI95%:0.8-3.1]), amisulpride (OR:1.2[CI95%:0.6-2.4]) and quetiapine (OR:1.2[CI95%:0.6-2.4]). A higher risk of high PAD ( $\geq 90/\geq 80$  if

diabetes/renal/CHD) was seen with haloperidol (OR:2.4[CI95%:1.2-5.0]) versus ziprasidone, followed by olanzapine (OR:1.7[CI95%:0.8-3.5]), amisulpride (OR:1.4[CI95%:0.6-3.1]) and quetiapine and risperidone (OR:1.4[CI95%:0.6-3.0]).

**Conclusion:** Frequency of MS was not statistically different according to type of therapy. However, significantly more patients with quetiapine, olanzapine and haloperidol showed two components of MS than with ziprasidone. On behalf of the CLAMORS Study Group

### P-18-13

Effects of Zuclopenthixol on destructive behaviour of adults with mental retardation

F. Haessler, T. Glaser. *Universität Rostock Kinder u. Erwachs. Psychiatrie, Rostock, Germany*

**Objective:** Only few studies have shown the efficacy of classic antipsychotics on behavioural disturbances particularly on aggression (Baumeister et al. 1998). Santosh and Baird remarked in 1999 zuclopenthixol is the only conventional antipsychotic that has any positive effect on chronic behavioural disturbances (Santosh and Baird 1999). This is in the line with our findings and three older studies, which found an efficacy of zuclopenthixol decanoate and zuclopenthixol dihydrochloride in adults with mental retardation and destructive behaviour.

**Methods:** All enrolled patients between the ages of 18 and 50 years with mental retardation had aggressive behaviour. In this study, 49 participants received open treatment with zuclopenthixol for up to 6 weeks. Responders were randomly assigned to continue or discontinue zuclopenthixol (mean 11.4 SD 5.8 mg/d) treatment during a 12 – week double-blind, placebo-controlled phase.

**Results:** Seven (41,2%) of 17 per protocol participants maintained on zuclopenthixol showed significant improvement ( $p < .05$ ) based on the weighted sum of MOAS scores versus the group switched to placebo (1/17 or 5,9%). Significant improvements from baseline were seen for mean scores of all efficacy measures, including the Clinical Global Impression- Global Improvement (CGI) ( $p < .002$ ), Disability Assessment Schedule (DAS) ( $p < .001$ ), and Nurse's Observation Scale for Inpatient Evaluation (NOSIE) ( $p < .005$ ). Adverse events were generally mild or moderate in severity.

**Conclusion:** Zuclopenthixol was effective and well tolerated for the treatment of destructive/aggressive behaviour in adults with mental retardation.

### P-18-14

Relation of change in clinical symptoms to cognitive improvement with atypical antipsychotics

J. Dunn, F. Canas, P. Harvey, M. Green, C. Bowie, A. Loebel. *Pfizer Inc., New York, USA*

**Objective:** To empirically identify the dimensions of change in psychosis and clinical symptoms of schizophrenia and assess the potential correlation with cognitive improvement in subjects switched to ziprasidone from other antipsychotics.

**Methods:** 185 subjects switched from conventional antipsychotics, risperidone, or olanzapine to open-label ziprasidone were rated with PANSS and administered a cognitive battery measuring functional outcomes known to improve with atypical antipsychotics. A composite score was created by

standardizing baseline scores and generating an average. Assessments occurred at 6 weeks and 6 months.

**Results:** PANSS and cognitive performance scores improved significantly at 6-week and 6-month endpoints. Early improvements constituted >90% of total PANSS change ( $P < 0.05$  for 28/30 items at 6 weeks). Factor analyses identified 4 factors—psychotic symptoms, negative symptoms, hostility/aggression, anxiety/depression—with Eigenvalues >1.0. Correlational analyses of cognitive global scores and clinical changes indicated that greater baseline cognitive impairment predicted only slightly reduced ( $r = -0.20$ ,  $P < 0.05$ ) negative-symptom response from baseline to week 6. Baseline-to-endpoint changes in all 4 factors were uncorrelated with cognitive changes during this time ( $r < 0.08$ ,  $P > 0.5$ ).

**Conclusion:** Switching subjects to ziprasidone from other antipsychotics was associated with independent improvements in major schizophrenia symptoms, hostility, affective symptoms, and cognition. Improvements were detected at 6 weeks and sustained at 6 months. The change in cognitive functioning was not consequent to other clinical changes, corroborating previous findings that cognitive change in schizophrenia can be discriminated from other treatment-associated clinical changes.

### P-18-15

Clinical status course and quality of life after the first 2 years of treatment: Result from the European schizophrenia outpatient health outcomes (SOHO) study

D. Novick, J. Haro, M. Belger, D. Novick, S. Tziveleakis, M. Ratcliffe. *Eli Lilly and Company, Indianapolis, USA*

**Objective:** To describe the clinical status and quality of life (QoL) of schizophrenic outpatients treated with olanzapine versus other antipsychotics over 2 years. **BACKGROUND:** European SOHO is a prospective, observational study of antipsychotic treatment in 10 European countries.

**Methods:** Clinical effectiveness and QoL were assessed using the Clinical Global Impression (CGI) scale and the EQ-5D instrument, respectively. For analysis, the 2-year period was split into four 6-month epochs (0-6, 6-12, 12-18 and 18-24 months). Multivariate modelling was performed, adjusting for baseline differences among patients.

**Results:** A higher proportion (75%) of olanzapine-treated patients responded after 24 months of continuous treatment, in terms of overall CGI severity, compared with the risperidone (65%), quetiapine (62%), amisulpride (68%), clozapine (68%), oral (60%), and depot typicals (59%) groups. Olanzapine-treated patients had statistically higher overall CGI improvements during i) the first 6 months, compared with risperidone (0.20;0.14-0.26)-, quetiapine (0.24;0.15-0.33)-, amisulpride (0.12;0.00-0.23)-, oral (0.33;0.25-0.41)- and depot typicals (0.33;0.24-0.42)-treated patients, and ii) second 6 months compared with oral typicals (0.12;0.04-0.19)-treated patients. No statistical separation was observed between the olanzapine and clozapine groups. Olanzapine-treated patients had statistically higher EQ-5D utility improvements during the first 6 months compared with risperidone (0.034;0.015-0.053)-, quetiapine (0.033;0.010-0.061)-, amisulpride (0.043;0.006-0.080)-, oral (0.075;0.050-0.100)- and depot typicals (0.073;0.045-0.102)-treated patients. No statistical separation was observed between the olanzapine and clozapine groups.

**Conclusion:** Olanzapine appears to have a range of modest effectiveness and QoL advantages, appearing during the first 6 months of treatment and remaining thereafter, over other

antipsychotic medications, except clozapine. LIMITATIONS: This is a non-randomized study.

### **P-18-16**

Atypical antipsychotics and risk of first-time idiopathic venous thromboembolism: A case report

L. Borrás, A. Eytan, E. Constant, P. Huguelet. *University Hospital of Geneva Dept. of Psychiatry, Bruxelles-Belgique, Belgium*

**Objective:** Several studies and reports have demonstrated an increased risk of venous thromboembolism in patients treated with conventional antipsychotic drugs. Recent reports also indicate an association between clozapine and venous thromboembolic events; however, to our knowledge, thromboembolic complications have not yet been described in patients taking olanzapine or risperidone.

**Methods:** We report the case of a 28 year old man, suffering from a schizoaffective disorder, with no identified risk factors for thromboembolism, who developed such a complication on three occurrences, once during treatment with olanzapine and twice with risperidone.

**Results:** According to the literature, risk of venous thromboembolism is the highest during the three first months of treatment with atypical antipsychotics. The biological mechanisms responsible for this possible adverse drug reaction are unknown, but a number of hypotheses have been proposed. The increased risk may be the result of drug-induced sedation, obesity, hyperleptinemia,

antiphospholipid antibodies and increased activity in the coagulation system. The association could also be related to underlying risk factors present in patients with psychosis such as smoking, catatonia or physical restraint.

**Conclusion:** The case we report suggests that clinicians should be aware of this possible serious adverse drug reaction. Studies are needed in order to further elucidate this phenomenon, particularly to determine the incidence rate, possible predisposing factors and the biological mechanisms involved. This is particularly important since atypical antipsychotic drugs are now commonly prescribed, replacing conventional neuroleptics.

Tuesday, April 5, 2005

---

### **LS-05. Satellite symposium: The promise of atypical antipsychotics: fewer side effects mean enhanced compliance and improved functioning**

**Luncheon Satellite  
Supported by an unrestricted educational grant  
from AstraZeneca**

12.30 - 14.00, Gasteig - Carl-Orff Hall

---