

Cincinnati College of Medicine, Cincinnati, OH, USA⁴ Case Western Reserve University, Cleveland, OH, USA⁵ University of Minnesota Medical School, Minneapolis, MN, USA⁶ McLean Hospital, Harvard Medical School, Belmont, MA, USA

Introduction: The changes in metabolic parameters in olanzapine-treated adolescents were examined.

Methods: Data from 454 adolescents (13–18, mean=15.9 years) with schizophrenia or bipolar I disorder were pooled from 4 olanzapine (2.5–20.0mg/day) studies (4–32 weeks). Changes in metabolic parameters in adolescents were compared with those of olanzapine-treated adults (pooled from 84 clinical trials); changes in weight and BMI were compared with US age- and sex-adjusted standardized growth curves.

Results: Olanzapine-treated adolescents had significant increases from baseline-to-endpoint in fasting glucose ($p=.021$); total cholesterol, LDL, and triglycerides ($p<.001$); and significant decreases in HDL ($p<.001$). Significantly more adolescents gained $\geq 7\%$ of their baseline weight versus adults (65.1% vs. 35.6%, $p<.001$); mean change from baseline-to-endpoint in weight was significantly greater in adolescents (7.0 vs. 3.3kg, $p<.001$). Adolescents had significantly lower mean changes from baseline-to-endpoint in fasting glucose (0.3 vs. 0.1mmol/L, $p=.002$) and triglycerides (0.3 vs. 0.2mmol/L, $p=.007$) versus adults. Significantly more adults experienced treatment-emergent normal-to-high changes at anytime in fasting glucose (4.8% vs. 1.2%, $p=.033$), total cholesterol (6.9% vs. 1.1%, $p=.001$), LDL (5.8% vs. 1.5%, $p=.014$), and triglycerides (25.7% vs. 17.4%, $p=.030$). Compared with standardized growth curves, olanzapine-treated adolescents had greater increases from baseline-to-endpoint in weight (1.0 vs. 7.1kg, $p<.001$), height (0.5 vs. 0.7cm, $p<.001$), and BMI (0.2 vs. 2.2kg/m², $p<.001$).

Conclusion: Olanzapine-treated adolescents may gain significantly more weight compared with adults, but may have smaller changes in other metabolic parameters. Clinicians may want to consider both efficacy and changes in metabolic parameters when selecting treatment options for individual adolescent patients.

P168

Olanzapine-induced metabolic abnormalities, switching from olanzapine to aripiprazole

M. Cetin, M. Karagozolu. *Department of Psychiatry, Gulhane Military Academy, Haydarpaşa Training Hospital, Uskudar, Istanbul, Turkey*

Background: Some atypical antipsychotics particularly clozapine and olanzapine have serious metabolic side effects like metabolic syndrome.

Objective: To determine whether olanzapine-induced metabolic abnormalities identified through monitoring can be changed by switching to aripiprazole in patients with schizophrenia.

Methods: Current research show that fifty stable outpatients suffering from metabolic side effects due to olanzapine medication were switched to an open-label, flexible-dose of aripiprazole (10-30 mg/day) in this 13-week naturalistic study. An extensive metabolic evaluation was conducted on all patients, at baseline, at 6 weeks, and at 13 weeks post switch. Metabolic abnormalities consist of new onset diabetes, impaired fasting glucose, impaired glucose tolerance, metabolic syndrome according to various definitions, and dyslipidemia. After 13 weeks of treatment with aripiprazole (mean dosage 16.8 mg / day), there was a significant decrease in body weight, body mass index, and waist circumference. The rates of in

fasting glucose, fasting insulin, insulin resistance index, and serum lipids levels (cholesterol, triglycerides, low-density lipoprotein (LDL), LDL/HDL, Chol/HDL, and non-HDL cholesterol) were reduced. Also three subjects with recent onset diabetes were reversed at 3 months follow-up. The metabolic syndrome was reversed in 64% of patients at 3 months.

Conclusion: The change of psychotropic drug treatment from olanzapine to aripiprazole in stable outpatients with schizophrenia was generally well tolerated and was associated with significant improvements at 13 weeks. Results support the reversibility of olanzapine-induced metabolic abnormalities when detected early and followed by a switch to aripiprazole.

P169

Adherence to treatment and risperidone metabolism phenotypes

A. Ceverino^{1,2}, E. Baca-Garcia¹, M.M. Perez-Rodriguez³, I. Basurte¹, A. Fernandez del Moral⁴, M.A. Jimenez Arriero⁵, A. Llerena⁶, P. Dorado⁶, R. Alamis⁶, J. De Leon⁷. ¹ *Department of Psychiatry, Fundacion Jimenez Diaz, Madrid, Spain* ² *Servicios de Salud Mental Distrito de Hortaleza, Madrid, Spain* ³ *Department of Psychiatry, Ramon Y Cajal Hospital, Madrid, Spain* ⁴ *Servicios de Salud Mental Distrito Centro, Madrid, Spain* ⁵ *Servicios de Salud Mental Distrito Arganzuela, Madrid, Spain* ⁶ *Center of Clinical Research, University Hospital Infanta Cristina, Extremadura University, Spain* ⁷ *Department of Pharmacology and Psychiatry, Kentucky University, Lexington, KY, USA*

Background and aims: CYP2D6 metabolizes risperidone into 9-hydroxi-risperidone, as well as other drugs. CYP2D6 shows genetic polymorphism, and 6-8% of Caucasians are “slow metabolizers”. “Fast metabolizers” show lower plasma levels of risperidone and higher levels of 9-hydroxi-risperidone than “slow metabolizers”. The aim of this study is to collect information about the hypothetical relationship between metabolism phenotype and parameters related to sanitary resources utilization in patients treated with risperidone.

Methods: Plasma levels of risperidone and 9-hydroxi-risperidone were determined in 52 patients treated at the Acute Unit setting, to establish their metabolism phenotype. Patients were grouped as fast ($n=11$), slow ($n=13$) or intermediate metabolizers ($n=28$), according to risperidone/9-hydroxi-risperidone ratio logarithm and using eighty and twenty percentiles as cut-points. Hospitalizations, emergency services utilization and visits to community mental health center during two years were recorded in the three groups.

Results: Fast metabolizers showed a higher mean number of visits to community mental health centers (35.7 vs 24.8, fast and slow metabolizers respectively, $p=0.667$), a higher mean number of hospitalizations (2.45 vs 1.3, fast and slow metabolizers respectively; $p=0.091$), a longer mean length of hospitalizations (57.3 vs 47.6 days, fast and slow metabolizers respectively; $p=0.581$) and a higher number of visits to emergency services (2.45 vs 1, fast and slow metabolizers respectively; $p=0.01$), although differences only reached statistical significance in this last parameter.

Conclusions: In spite of methodological limitations (mainly the small sample size), the present study shows some preliminary evidence about the influence of pharmacogenetic factors on the evolution of psychotic patients treated with risperidone.

P170

Effect of nice guidance on treatment of outpatients with schizophrenia in a uk depot clinic

A. Crockett, M. Goldstein. *The Priestley Unit, Dewsbury and District Hospital, Dewsbury, West Yorkshire, United Kingdom*

Background and aims: To determine whether depot patients on typical antipsychotics may benefit from a treatment switch.

Methods: Outpatients with a reported diagnosis of schizophrenia attending a depot clinic in Dewsbury, UK, were given full psychiatric and physical reviews. Recommendation of patients' future treatment was based on findings. Treatment switches were made three months after baseline assessments.

Results: Of 111 patients considered for review, 108 (63 men/45 women) were assessed; 94.4% had a diagnosis of schizophrenia. Before review, 98% received typical antipsychotic depot preparations and 2% the long-acting atypical antipsychotic, Risperdal Consta. Nearly two-thirds (63.0%) received flupentixol decanoate. Following review, 74.1% patients received long-acting injectable medication, 24.1% oral medication and two patients discontinued treatment. Of those on long-acting injectable antipsychotics, 85.0% received typical depots; 15.0% Risperdal Consta. Most (92.3%) oral medications were atypical antipsychotics. Nearly two-thirds of patients (62.0%) continued on the same medication. On review, hyperprolactinaemia was found in 28 (25.9%) patients, particularly women; treatment was changed for 17 patients, mainly to Risperdal Consta. Eleven (10.2%) patients had glucose abnormalities; treatment was changed for three to risperidone preparations. 41.7% patients had other biochemical abnormalities, mainly liver function tests and dyslipidaemia. Nearly 40% were hypertensive and around one-quarter had electrocardiogram abnormalities.

Conclusions: Data suggest that depot patients on typical antipsychotics may benefit from medication review to consider use of atypicals and other newer classes of antipsychotics, and that health monitoring of these patients may be prudent.

P171

Long-acting risperidone improves negative symptoms in stable psychotic patients

V.A. Curtis¹, K. Katsafourous², H.J. Moeller³, R. Medori⁴, E. Sacchetti^{5,6}. ¹*Institute of Psychiatry, Maudsley Hospital, London, United Kingdom* ²*Tarsi Psychiatric Clinic, Psychotherapeutic Center, Dromokaition State Hospital, Athens, Greece* ³*Department of Psychiatry, University of Munich, Munich, Germany* ⁴*Janssen-Cilag, Medical Affairs EMEA, Beerse, Belgium* ⁵*University Psychiatric Unit, Brescia University School of Medicine, Brescia, Italy* ⁶*Department of Mental Health, Brescia Spedali Civili, Brescia, Italy*

Objective: To evaluate the efficacy of risperidone long-acting injectable (RLAI) for reducing negative symptoms of schizophrenia in patients with predominantly negative symptoms at baseline.

Methods: This subanalysis on data from the 6-month, open-label Switch to Risperidone Microspheres (StoRMi) trial included patients with Positive and Negative Syndrome Scale (PANSS) negative subscale score ≥ 21 , which was higher than their PANSS positive subscale score. Improvement in negative symptoms was assessed on the PANSS negative subscale and the negative factor score based on [1]. Additional outcome variables included measures in general functioning, quality of life, and patient satisfaction.

Results: A total of 842 patients were eligible for inclusion in this subanalysis. Six months of treatment were completed by 631 (74.9%) patients. 43 (5.1%) patients discontinued treatment due to an adverse event. Negative symptoms were significantly reduced by 6.1 +/- 6.3

points for the PANSS negative score and 6.1 +/- 6.4 points for the negative factor score¹, ($P < 0.0001$ for both). Significant improvements were also noted for total PANSS and other PANSS subscale scores, general functioning, quality of life, and patient satisfaction ($P < 0.0001$). The most common treatment-emergent adverse events ($>5\%$): anxiety (6.8% of patients), exacerbation of disease (6.2%), and insomnia (5.7%). Overall RLAI was well tolerated and associated with significant reductions in movement disorder severity.

Conclusion: RLAI treatment resulted in significant improvement in negative symptom severity and was well tolerated in patients with predominantly negative symptoms, who switched from a stable antipsychotic regimen.

Reference

[1] Marder, et al., *J Clin Psychiatry* 1997;58:538.

P172

Patients attending a psychiatric emergency service: What do they really want?

J. De Fruyt^{1,2}, H. Vervaeke¹, M. Haspeslagh¹, S. Aneca¹, H. van den Aemele¹. ¹*Department of Psychiatry, General Hospital AZ Sint-Jan AV, Brugge, Belgium* ²*Department of Psychiatry, University Hospital Gasthuisberg, Leuven, Belgium*

Background: Mental health-related visits to emergency departments are growing. Research on the decision making process in psychiatric emergency services (PES) has focused on the severity of symptoms and dangerousness as predictors of admission or discharge. Patient requests have been understudied in this predominantly medical approach.

Objectives: The main objective of this study was a standardized evaluation of patient requests in PES.

Methods: The 'Hulpvragenlijst' (HVL), a 61-item self-rating questionnaire was administered to 102 consecutive patients attending the PES of a general hospital. The HVL assesses 7 different components of patient requests: psychological, relational, problem-oriented, medical, information-oriented, and psychiatric. Exclusion criteria were disturbed consciousness and severe psychomotor agitation.

Data processing following the rules of HVL aggregation was performed. Redit analysis was further used for refined data aggregation. This is a method for comparing ordinal-scale responses. Patient requests were looked at in different subgroups (according to diagnosis and disposition).

Results: Data processing following the rules of HVL aggregation showed that the main request of patients was information-oriented, less relational or medical. Redit analysis showed a more refined pattern of requests in different diagnostic and dispositional categories: each category characterized by a distinct profile of requests.

Conclusions: Patient requests, besides the severity of symptoms and dangerousness, are a supplemental view on the needs of patients attending PES. These different components should be entered into a "negotiation" that ultimately results in a treatment decision. If confirmed in other studies these data could be used for the future development of PES service delivery.

P173

Trp64Arg beta3 adrenergic polymorphism in antipsychotic-induced weight gain and obesity: A meta-analysis