

been shown to be effective and well tolerated in long-term studies lasting up to 12 months¹⁻².

Methods: A 52 weeks open label trial has been performed in 347 stable subjects with schizophrenia or schizoaffective disorders, switching from any previous antipsychotic treatment, in order to evaluate the maintenance of efficacy of RLAI.

Results: 70% of subjects completed the study. Mean PANSS total score significantly improved at each assessment visit 4, 12, 26, 38 and 52 weeks ($p < 0.001$). Similar improvements were observed for the PANSS positive, negative and general psychopathology subscales. At 52 weeks, 58% of patients had a $> 20\%$ improvement in the PANSS total score compared to baseline. Functionality as measured by GAF improved at each assessment visit till week 52 ($p < 0.001$). Significant improvement was also seen for CGI evaluation ($p < 0.05$). Treatment with RLAI was well tolerated: 30% of subjects experienced at least 1 adverse effect (AE), and 52% of the AEs were mild and 81% did not require treatment change. Only 3% subjects experienced an extrapyramidal symptom related to RLAI. No significant ($p = 0.09$) weight gain was observed.

Conclusion: Direct transition to RLAI in psychotic subjects offers a better, significant and sustained control of symptoms with a good tolerability profile.

1Moller HJ et al. *Int Clin Psychopharmacol* 2005, 20: 121-13.

2Kissling W et al. *J of Psychopharmacol* 2005, 19: 15-21.

P0296

Effective switch to aripiprazole after amisulpride and ziprasidone induced hyperprolactinemia: A case report

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Background and Aim: Of all the Second-Generation Antipsychotics (SGAs) risperidone and amisulpride have the highest propensity to elevate prolactin levels. Ziprasidone seems to be less frequently associated with hyperprolactinemia and aripiprazole may even lower prolactin levels. We describe the case of a patient who developed clinically significant hyperprolactinemia while taking both amisulpride and ziprasidone, which resolved with the introduction of aripiprazole

Material: Ms. A a 22-year old woman had a history of paranoid schizophrenia. Two years ago, she was treated with amisulpride 400 mg/day. After 8 weeks of amisulpride treatment, the patient complained of galactorrhea and amenorrhea and her prolactin level was 54 ng/ml. Brain magnetic resonance imaging showed no evidence of a pituitary microadenoma. Two weeks after she stopped taking amisulpride, her prolactin level was 3.8 ng/ml and she menstruated 1 week later. She was given ziprasidone 120 mg/day. Her psychotic symptoms disappeared, but she did not menstruate and her prolactin level rose to 37,4 ng/ml. Ms. A was switched to aripiprazole 10 mg/day.

Results: Only 2 days after the beginning of aripiprazole treatment, the patients prolactin level decreased to 5,6 ng/ml. Her menses resumed with 3 weeks of stopping ziprasidone and remained regular for at least 20 months. Her prolactin level remained normal (the last one was 3,23 ng/ml).

Conclusion: While aripiprazole appears to modulate dopaminergic and serotonergic neurotransmission in a manner similar to that of SGAs, its partial D2 receptor agonism provides decreased liability for hyperprolactinemia.

P0297

Comparing the effectiveness of aripiprazole and quetiapine in schizophrenia and psychoses: An independent retrospective study

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Background and Aims: Aripiprazole and quetiapine are the two most recent second generation antipsychotics available in the UK. We aimed to study patients who were prescribed aripiprazole and quetiapine in routine clinical practice, to identify and compare patients who had a good clinical response.

Methods: From a data set of 22,000 electronic patient records (from 2002 to 2007), we retrospectively identified all secondary care psychiatric patients started on aripiprazole and quetiapine for schizophrenia and other psychotic disorders. We retrospectively assigned a severity and an improvement score of Clinical Global Impression (CGI) to records, to measure the effectiveness of both drugs.

Results: 89 patients were newly prescribed aripiprazole and 132 patients prescribed quetiapine, for schizophrenia and other psychotic conditions. Patients on aripiprazole had a lower initial severity of illness, CGI (Severity) 3.9 versus 4.4, $p = 0.0003$. After excluding treatment resistant patients, a CGI (Improvement) score 1-4 (minimally to very much improved) was achieved with aripiprazole in 69% and quetiapine in 71% of patients. There were no statistical differences in overall discontinuation rates (aripiprazole 40%, quetiapine 41.5%). There were differences in mean time to discontinuation, aripiprazole, 165 days, quetiapine, 267 days ($p = 0.017$)

Conclusions: This study is an independent comparison of aripiprazole and quetiapine in schizophrenia and psychoses. Both aripiprazole and quetiapine were clinically effective in the majority of patients. CGI improvement scores were similar for both drugs as were overall discontinuation rates. Patients on aripiprazole, however, discontinued earlier than those discontinuing from quetiapine.

P0298

Factors influencing adherence: A patient survey

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Adherence to medication is often poor in patients with schizophrenia and is a common cause of relapse.

This survey was conducted to assess various factors thought to affect patient adherence to psychotropic medications. Patients were also specifically asked whether they would accept a depot injection if indicated.

A total of 108 outpatients completed the survey over a period of three months. The most common diagnoses were schizophrenia, bipolar affective illnesses and depressive illnesses.

The survey tool comprised two questions. Firstly, "What makes you stick to the medication?" There were seven options and patients could choose as many as applicable. The options were Obedience, Effectiveness, Tolerability, Remission, Relapse Prevention, Insight and Concordance. The second question asked if they would accept a depot injection if it was indicated.

The two most frequently cited reasons for taking medication were Effectiveness (43.5%) and Obedience (35%). All five other reasons

were cited by less than 10% of patients, with Tolerability being the lowest (0.93%).

Of the 58 people who participated in the second question, 72.4% agreed to accept the depot injection if indicated. Male patients were more likely to accept depot medication than female patients (75% vs. 69%).

This survey suggests that despite patient choice being promoted by user groups and government policy, many patients are still motivated to heed their doctor's advice. This may be particularly relevant when prescribing depot medications as shown by the number of patients willing to accept injections.

P0299

Atypical antipsychotics and their metabolic impact on psychiatrically hospitalized children and adolescents

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Objective: Atypical antipsychotic use in youth has increased. Adverse metabolic effects on weight, lipids, and glucose are evident in adults, but inadequately studied in youth. This report focuses on the metabolic effects of these agents in psychiatrically hospitalized youth.

Methods: Inpatient subjects were assessed at admission, 3 weeks, and discharge. Weight, body mass index, blood pressure, fasting glucose levels, high and low density lipoproteins (HDL and LDL, respectively), and triglycerides were measured.

Results: N=112 subjects, diagnosed as: Affective Disorders (26.4%), Disruptive Behavior Disorders (32.6%), Pervasive Development Disorders (9.3%), Psychotic Disorders (5.4%), and Others (26.3%). Ages ranged from 4-17 years. Patients received: risperidone (N=41), olanzapine (N=13), quetiapine (N= 15), aripiprazole (N=22), while 34 patients received no medication. Average length of hospital stay (LOS) was 55.9 days (1-289). For the sample as a whole, trends of statistical differences were noted in weight at the time of discharge (+3.79 lbs). Weight gain at discharge was significantly correlated with only olanzapine ($r=.553$, $p<0.0001$), multiple regression analysis controlling for LOS is also significant (Beta .558, $p < 0.0001$) for olanzapine. For the medication treated group, statistically significant increases in HDL are noted at three weeks (+ 5 mgs/dl, $p = 0.023$); at discharge the difference was not significant. A similar trend was observed for glucose. There was a statistical trend for decrease in triglycerides at 3 weeks (15 mg/dl, $p = 0.054$), discharge difference was non-significant (-9 mg/dl).

Conclusion: Certain agents may carry greater propensity for inducing certain metabolic changes, but further study is required.

P0300

Second generation antipsychotic medications induce type 2 diabetes like syndrome by increasing hepatic glucose output and subsequently insulin secretion: Implications for mechanism of drug action

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Second generation antipsychotic drugs used to treat schizophrenia have been reported to induce weight gain and a Type-2 diabetes like syndrome in humans. Evidence indicates that these drugs induce this syndrome by promoting insulin resistance in peripheral tissues. However, supra-physiological levels of the drugs are required to cause this insulin resistance in model systems. Here we have investigated the effects of therapeutically relevant levels of 3 different antipsychotic medications (Haloperidol, Quetiapine and Clozapine) on glucose metabolism. We find that at these concentrations antipsychotic drugs do induce impaired glucose tolerance in rats which is associated with increased insulin secretion, but independent of weight gain (Clozapine>Quetiapine>Haloperidol). However, activation of Akt/PKB is normal and at these levels of drug there was no major effect on insulin action in fat cells. This suggested that the drugs were not inducing insulin resistance per se. Instead we show that the drugs stimulated hepatic glucose production, and the effect is at least in part mediated by a stimulation of glucagon secretion. We also find that the increased glucose production is responsible for increased insulin secretion and that blocking insulin secretion attenuates the activation of the enzyme Akt/protein kinase B in the hippocampus. This data provides new information on the mechanisms by which second generation antipsychotic drugs regulate glucose metabolism. Thus, the glucose production and the subsequent insulin release may form part of the therapeutic actions of the drugs by acting to restore defective Akt/PKB signalling that is associated with schizophrenia.

P0301

First- vs Second-generation antipsychotics in psychotic disorders: Efficacy and tolerability issues

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Objective: To compare the efficacy and tolerability of first- and second-generation antipsychotics (FGAs & SGAs, respectively) in the treatment of psychotic disorders.

Methods: PANSS scale was employed to measure disease severity and the efficacy of treatment. In all participants PANSS score was calculated on admission, before releasing the patient, and in case of any change in antipsychotic treatment schedule. Demographic data and comprehensive information on psychotropic medication status were collected for all patients.

Results: 377 patients (51.5% males) admitted to the Department of Old Age Psychiatry and Psychotic Disorders, Medical University of Lodz, have been recruited for the study. Eighty two percent of participants were suffering from schizophrenia. The average improvement in PANSS score amounted to 22,85%. The demographic and clinical characteristics of patients being prescribed FGA or SGA were comparable. No statistically significant differences in the efficacy of FGAs vs SGAs, as well as mono- vs polytherapy were observed. SGAs were better tolerated than FGAs. A higher initial severity of symptoms was the only predictor of a major, over 40% improvement in PANSS score. FGA and SGA therapies proved equally effective in generating such substantial decreases in symptoms' severity.

Conclusions: In our sample, the efficacy of FGAs and SGAs in the treatment of psychotic disorders was comparable. The tolerance of SGA therapy was better than for FGAs. Therapeutic success seems to be more dependent on adequate dosage than the class of an antipsychotic agent.