

evidence, that clozapine-induced weight gain is predictive of clinical response in patients with schizophrenia.

**Objectives:** The aim of this study was to determine if weight gain and changes in metabolic measures with olanzapine and risperidone also predict clinical response in patients with schizophrenia, schizoaffective disorder, or bipolar disorder.

**Methods:** Data from a 12 month, randomized, prospective study of the effects of olanzapine and risperidone in 160 patients with schizophrenia (SCH) and schizoaffective disorder (SAD), and bipolar disorder (BPD) on weight gain, BMI increase and metabolic measures including fasting blood glucose, hemoglobin A1c, total cholesterol, triglycerides, HDL, triglycerides/HDL ratio, log triglycerides, LDL to predict improvement in PANSS total scores.

**Results:** Weight gain and increase in BMI predicted the clinical response to olanzapine, but not risperidone, in patients with SCH or SAD, but not BPD, at 1, 3 and 6 months, when used in combination with other psychotropic medications or no concomitant mood stabilizers. Changes in lipid and glucose measures did not predict response to either drug.

**Conclusions:** Olanzapine-induced weight and BMI increase predicted decrease in PANSS total score at 1, 3, 6 months. No such relationship was found for risperidone-treated patients in either diagnostic group. These results suggest weight gain and clinical response to olanzapine and clozapine may be based on similar mechanism which differentiates them from risperidone.

## P0255

Effect of risperidone-induced hyperprolactinemia on bone mineral density in youth

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**Background and Aims:** Hyperprolactinemia can inhibit sex steroids, resulting in bone loss. We, thus, set out to evaluate the effect of risperidone-induced hyperprolactinemia on bone mineral density in youth.

**Methods:** Children and adolescent males treated with risperidone for a minimum of six months underwent volumetric bone mineral density (vBMD) measurement using peripheral quantitative computerized tomography of the ultra-distal nondominant radius. Their treatment history was reviewed and their prolactin and testosterone serum levels measured.

**Results:** We recruited 73 males (mean age: 12.1yrs [SD=2.9], mean Tanner stage: 2.6 [SD=1.4]) treated with 0.03mg/kg (SD=0.02) of risperidone per day for an average of 3.1yrs (SD=1.9). Hyperprolactinemia (defined as a prolactin level > 18.4ng/ml) was present in 51% of the sample. After controlling for Tanner stage which was strongly associated with serum testosterone, we found a trend for a negative effect of prolactin on testosterone. As expected, ultra-distal radius cross-sectional area and cortical vBMD, but not trabecular vBMD, increased with pubertal development. After adjusting for prolactin and pubertal stage, in the subgroup of peri/pubertal (i.e. Tanner stage ≥ 2) participants with hyperprolactinemia, prolactin was negatively associated with trabecular, but not cortical, vBMD.

**Conclusion:** To our knowledge, our data are the first to describe the negative effect of risperidone-induced hyperprolactinemia on bone mineral density following long-term treatment in youth.

## P0256

Aripiprazole in schizophrenic patients

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We worked with a group of 36 patients diagnosed with schizophrenia (DSM-IV-TR) who were in a chronic condition, with a predominance of negative and depressive-amotivational symptomatology. They were on a long-term therapy with antipsychotic agents, achieving just a light improvement on the symptoms.

We switched to aripiprazole using a daily dosage of 15-30 mg. We evaluated the results on PANSS and ICG scales at the beginning of the treatment and after the first and third month, whilst paying special attention to the side-effects and adverse reactions that occurred. Concomitantly, we used benzodiazepines and hypnotics during the first two weeks, and antiparkinsonism agents were not needed.

From an average initial PANSS score of 74 and ICG score of 3.6, after a month, PANSS average score lowered to 60 and ICG's came down to 3. After 3 months, PANSS average score was 45 and ICG's was 2.5.

There was no need for discontinuing the treatment in 35 of the patients. One patient discontinued treatment and follow-up. Side-effects were Invaluable in general, though at the start insomnia and light jitteriness were observed in some of the patients.

We believe that aripiprazole is a very useful antipsychotic drug, not only for controlling acute episodes, but also on chronic patients for its effectiveness and good tolerability.

## P0257

Effects of antipsychotics on aggression during acute hospitalization

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Aggression is a transnosographical dimension in psychiatric patients. The aim of the present study was to explore the aggressive dimension in acute hospitalised patients, with regard to the pharmacotherapeutic approach.

351 patients were consecutively admitted to a psychiatric ward during a 12 months period. Aggressive behaviours were analysed using the MOAS scale, at admission (T0) and at discharge (T1), after 12.4 ± 8.8 days. General psychopathology was assessed via BPRS, at T0 and T1.

Aggressive behaviours occurred in 8.9% of the cases during the hospitalization. Male gender, compulsory admission status, comorbid substance abuse, a recent history of aggressive behaviours were significantly associated with an increased risk of committing aggressive acts (p<0.05). Antipsychotics were the most frequently prescribed medications (76.6% of the cases). The effects of each antipsychotic medication on the amelioration in MOAS score and BPRS score were presented in Fig. 1a and 1b respectively. Percent of amelioration in BPRS score was significantly correlated with amelioration in MOAS score (r=0.35, p<0.0001).

The results evidenced small but significant differences among antipsychotic drugs regarding the efficacy on aggressive dimension.