

Antipsychotic Treatment and Metabolic Syndrome: a Comparison Between Schizophrenic and Bipolar Patients

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Only few studies have compared the effects of Typical and Atypical Antipsychotics on Metabolic Syndrome (MS) onset. The present study examined the impact of antipsychotic treatment on MS in schizophrenic and bipolar patients. Medical records of 535 patients who completed a 1-year treatment with haloperidol, olanzapine, risperidone, paliperidone, quetiapine, aripiprazole, clozapine were retrospectively reviewed, and metabolic outcomes were evaluated. MS was diagnosed according to ATP III criteria. The mean daily dose of each antipsychotic was calculated in haloperidol equivalents (Eq). Schizophrenic patients were treated with a higher daily antipsychotic dose than bipolar ones (5.9 mg /die \pm 4.2 mg/die vs 4.9 mg/die \pm 4.0 mg/die, $p < 0.01$). The mean equivalent antipsychotic daily dose was associated with a greater risk of MS onset irrespective of age and sex. Clozapine was faster in inducing SM (4,41 \pm 2,82 mesi), followed by haloperidol (6,06 \pm 3,918) and olanzapine (6,14 \pm 3,35). Risperidone elicited MS after a mean time of 9,13 \pm 3,24 months, followed by quetiapine (9,86 \pm 2,56), paliperidone (10,6 \pm 2,22) and aripiprazole (10,67 \pm 2,31). Therefore, in our patients, MS was mainly induced by olanzapine and clozapine in schizophrenic patients, while quetiapine and olanzapine were more implicated in inducing MS in bipolars; the equivalent antipsychotic daily dose significantly correlated with triglycerides levels in schizophrenic patients, and with triglycerides and HDL levels in bipolar ones. We suggest the need for routinely metabolic assessments before and during antipsychotic treatment according to American Diabetes Association and American Psychiatric Association.