

EARLY METABOLIC SIDE EFFECTS AS PREDICTORS OF ANTIPSYCHOTIC TREATMENT RESPONSE: A 2-MONTH PROSPECTIVE STUDY

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Introduction: Metabolic side-effects of antipsychotics increase morbidity and non-compliance rates. Interestingly, preliminary evidence suggests that metabolic side-effects correlate with response to antipsychotic treatment. Few studies have examined the nature of this association in a prospective study design. We conducted an exploratory, naturalistic, prospective, trans-diagnostic study to examine this association.

Objective: To study the relation between metabolic side-effects and clinical improvement with antipsychotics, in psychotic illnesses [non-affective psychoses and mania-1st episode].

Methods: 100 (84 drug-free for at least one month) patients with psychosis initiated on antipsychotic treatment alone (65% on risperidone) were assessed on Brief Psychiatric Rating Scale (BPRS), visual analogue scale for appetite, anthropometric measurements (weight, waist circumference, body mass index), and serum lipid and glucose profiles at baseline, 2-4 weeks (n = 71) and 8-12weeks (n = 39).

Results: Subjects who dropped out at first/second follow-ups did not differ from those who followed-up, in age, sex, illness duration and BPRS scores. On forward stepwise multiple linear regression analysis, early (2-4weeks) increase in appetite and triglyceride levels ($R^2=0.257$; $p=0.003$) together predicted 26% variance in treatment response (BPRS score reduction) at first follow-up. At second follow-up 16% of variance in treatment response was predicted by early (2-4 weeks) increase in triglyceride levels ($R^2=0.169$; $p=0.009$) alone.

Conclusions: Early appetite and triglyceride changes predicted antipsychotic treatment response. Future research should (a) examine neural mechanisms that operate in both appetite regulation and antipsychotic action to further the understanding of psychosis and its treatment, and (b) identify early markers of treatment response.