

Metformin for metabolic dysregulation in schizophrenic patients treated with olanzapine

盧孟良;陳俊興

Chen CH;Chiu CC;Huang HC;Wu TH;Liu HC;Lu ML

摘要

Abstract

The second generation antipsychotic drugs, such as risperidone, olanzapine, and quetiapine, are effective in treating patients with schizophrenia and have been considered as the first line therapy. Recently, increasing attention has been drawn to the potential diabetogenic effect of these novel antipsychotics. The goal of this study was to evaluate the effect of metformin treatment on the olanzapine-induced metabolic disturbance in schizophrenic patients. Twenty-four schizophrenic subjects who had received olanzapine treatment at least 3 months were assigned to the therapy with metformin 1500 mg/day for 8 weeks. The metabolic parameters were quantitatively assessed at baseline, weeks 2, 4, and 8 by using the intravenous glucose tolerance test. After an 8-week treatment with metformin, the body weight, fasting levels of glucose, triglyceride, and insulin, insulin secretion, and insulin resistance significantly decreased. Half of study subjects with metabolic syndrome obtained improvement after the metformin trial. Subjects' psychopathological condition remained unchanged during the study period. The olanzapine-induced metabolic disturbance could be reversed after 8-week metformin treatment. Based on the results of this study, we hypothesize that metformin could modulate the effect of olanzapine-induced metabolic disturbance