

EFFECTS OF PALIPERIDONE EXTENDED-RELEASE TABLETS (PALIPERIDONE ER) AND OLANZAPINE ON METABOLIC PROFILE, WEIGHT, INSULIN RESISTANCE AND β -CELL FUNCTION IN SCHIZOPHRENIC PATIENTS: A RANDOMIZED 12-WEEK STUDY

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Metabolic syndrome induced by atypical antipsychotics is more prevalence in schizophrenic patients. Much less is known regarding paliperidone ER. The objective of this study was to compare matched paliperidone-ER- and olanzapine-treated schizophrenic patients on measures of glucose and lipid metabolism. Eighty hospitalized patients with schizophrenia (DSM-) were randomly assigned to treatment with paliperidone ER or olanzapine for 12 weeks. At baseline and every 4 weeks, we assessed weight, subcutaneous fat, waist and hip circumferences, fasting glucose, insulin, glycohemoglobin A1, cholesterol, triglycerides, high density level (HDL) cholesterol, low density level (LDL) cholesterol and prolactin. And we also evaluate the body mass index (BMI), homeostasis insulin resistance (HOMA-IR) and homeostasis β -cell function (HOMA-B). 33 patients randomly assigned to paliperidone ER and 23 patients randomly assigned to olanzapine completed the entire 12-week treatment. Within-group overall analysis showed that the fasting measures were increased in weight, BMI, waist circumferences, hip circumferences, subcutaneous fat, cholesterol, triglyceride and prolactin for two groups, and fasting glucose, LDL and HOMA-B were increased for olanzapine group. There was significantly difference in serum prolactin between paliperidone ER and olanzapine group. And there was a trend for HOMA-B to increase in olanzapine group over 12 weeks compared to paliperidone ER group. However, there were no overall differential drug effects over 12 weeks on the fasting measures of BMI, glucose, glycohemoglobin A1, insulin, HDL, LDL, cholesterol, triglyceride and HOMA-IR. The study further reinforces the necessity of regular monitoring the metabolic parameters in schizophrenic patients with atypical antipsychotics including paliperidone ER.