

The effects of antipsychotic drugs (Olanzapine and Risperidone) on body weight, body fat percentage and lipid profiles of patients with psychotic illness

ABSTRACT

Approximately 50% patients with psychotic illnesses on antipsychotic drugs have an increased risk of obesity. This study aimed to determine changes in body weight, body fat percentage and lipid profiles and to stress the importance of early nutrition intervention in the management of psychotic illness patient treated with antipsychotic drugs. This is a prospective longitudinal study conducted for 3 months in Hospital Mesra Bukit Padang, Kota Kinabalu, Sabah. A total of 150 patients with Diagnostic and Statistical Manual IV (DSM-IV) diagnosis of psychotic illness (either Olanzapine or Risperidone only at any dosage) first started or restarted after a treatment gap of at least 6 months were recruited. Weight, height and body fat percentage were measured using Bioelectrical Impedance Analysis (BIA) (Model Omron HBF-375) and blood fasting lipid test were taken from the point of starting medication for 12 weeks. Data were analysed using repeated measures of ANOVA for statistical method. All variables showed significant mean differences ($p < 0.05$) in increasing pattern throughout the 12 weeks of treatment. However, the total cholesterol of risperidone patients had no significant mean difference from initial to week 6 ($p = 0.282$). It was proven that there was increase in body weight, body fat percentage and lipid profiles among patients on olanzapine and risperidone. The limitation of this study might relate to the drugs' dosage and method used in assessing the body composition. It is suggested that early nutrition intervention is needed to control unnecessary gain of weight, body fat and lipid profiles in the management of patient with psychotic illnesses.