Abstract

Introduction: The use of antipsychotic medication in the treatment of schizophrenia is linked to obesity and metabolic syndrome. The link between metabolic syndrome and obesity related anthropometric measures and the use of atypical antipsychotics had been studied extensively. However comparative studies of typical and atypical antipsychotic therapy and their association with above variables are generally limited especially in Asia.

Aims: This study was conducted to compare body mass index (BMI) and waist circumference (WC) between three patient groups; those who received typical, atypical and the combination of both antipsychotic agents. In addition the correlation between these anthropometric variables and the Global Assessment Scale (GAS) and Clinical Global Impression Scale – Severity of illness (CGI-S) was also assessed.

Methodology: A cross sectional retrospective study was conducted at the Institute of Mental Health, Singapore, using the medical records of patients who attended their annual review clinic during the period from 1/4/2010 to 31/7/2011. 1000 patients were selected by systematic sampling. A standardized data collection form was used to record information. Demographic information, medical history, anthropometric indices such as height, weight, BMI and WC, blood pressure, GAS score and CGI-S score were obtained from annual review clinic records. Details of antipsychotics and other psychotropic medications were captured from the hospital electronic pharmacological data base, iPharm. Descriptive statistics, Pearson correlation test and linear regression model with multiple regressions were used for statistical analysis of data.

Results: There was no significant association between the type of antipsychotics used alone or in combination, with BMI and WC. Neither BMI nor WC was significantly correlated with GAS or CGI-S scores.

Conclusions: This study found that there was no significant differences in body mass index and waist circumference in patients with schizophrenia with regard to the type of antipsychotic medications (typical/atypical) taken either alone or in combination. This highlights the importance of metabolic screening regardless of the type of antipsychotics taken. Moreover no significant correlations were found between body mass index and waist circumference and Global Assessment Scale and Clinical Global Impression-Severity of Illness scores.