Hyperinsulinaemia Associated with -Adrenoceptor Antagonist in Medicated Bipolar Patients during Manic Episode

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摘要

Abstract

Hyperinsulinaemia, a pre-clinical condition which is considered to predict insulin resistance and metabolic syndrome, has not been sufficiently investigated in bipolar disorder, despite evidence to suggest that bipolar patients are at risk of developing insulin resistance. This study was set out to determine the alteration in fasting insulin levels and evaluate the factors associated with hyperinsulinaemia during manic episodes. Measurements were taken of the fasting plasma insulin and leptin levels, as well as the body mass index (BMI), amongst 42 physically healthy bipolar I manic (DSM-IV) patients aged < 45 with Young Mania Rating Scale (YMRS) scores of ≥ 26. These were then compared with their values in subsequent remission (YMRS < 12). A total of 14 patients (33.3%) in acute mania and 30 patients (71.4%) in subsequent remission met the Taiwanese criteria for hyperinsulinaemia of ≥ 8.7 μIU/ml for men, and ≥ 11.3 μIU/ml for women. Multiple analyses were then undertaken, without correction, as the exploratory analyses. The measurement, by logistic regression, of the use of propranolol in remission (odds ratio [OR] = 10.04, 95% confidence interval [95% CI]= 1.03-97.96) and the increase in BMI (OR =1.35, 95% CI= 1.01-1.80) were found to have independent associations with hyperinsulinaemia in subsequent remission. Our results suggest that medicated bipolar manic patients are vulnerable to hyperinsulinaemia in early remission, particularly those gaining bodyweight or those using β-adrenoceptor antagonist (beta-blockers), irrespective of the types of mood stabilizers or antipsychotics used.