Evaluation of lipid and blood sugar profile in patients with Bipolar Mood Disorder referred to psychiatry clinic of Fatemi educational and treatment center in Ardabil in 2021

Abstract

Background: Metabolic syndrome (MtS) is a cluster of metabolic abnormalities such as diabetes and dyslipidemia. MtS interferes with therapeutic process of bipolar disorder.

Despite the importance of this issue, the studies in Iran on bipolar patients with metabolic syndrome are limited.

So this study were performed to examine the MtS variables affecting bipolar disorders.

Aim: Considering the high prevalence of metabolic disorders such as diabetes and dyslipidemia and the problems it causes in the treatment of patients with bipolar disorder, we decided to investigate the profile of lipids and blood sugar in patients with bipolar disorder.

Materials and Methods: The present study was a cross-sectional-analytical study. The sample size of the present study was estimated to be 100 people, with 50 patients with bipolar disorder as the case group and 50 non-bipolar patients from other departments of the hospital (departments other than neuropsychiatric departments) which Age, gender and level of education were matched with the subject group, they were included in the study. To describe the data, dispersion tests of mean, standard deviation, median and variance were used, and t-test was used to determine the relationship between variables. Data analysis was done using SPSS version 22 statistical software.

Results: In the current study, 50 patients with bipolar disorder and 50 healthy individuals with an average age of 39.44 ± 11.88 and 38.59 ± 12.38 years, respectively, were matched in terms of gender, age, education level and employment. Were examined. Two indicators of fasting blood sugar (108.60 ± 42.26 vs. 91.69 ± 16.80, P=0.01) and blood sugar two hours after a meal

(168.22 ± 84.96 vs. 41.66 ± 135.86, P=0.01) in the group of people with bipolar disorder was significantly higher than the control group. While HbA1C did not have a significant difference between the two groups (4.95 ± 1.35 in patients with bipolar disorder and 4.62 ± 0.80 in the control group, P=0.14). Also, two indicators of triglyceride (168.40 ± 64.50 against 141.13 ± 36.11, P=0.01) and cholesterol (189.78 ± 36.91 against 164.82 ± 37.33, P=0.01) P < 0) in the group of people with bipolar disorder was significantly higher than the control group. Mean systolic and diastolic blood pressure, waist circumference and BMI did not differ significantly between the two groups (P<0.05). A larger fraction of patients with bipolar disorder than the control group had metabolic syndrome (48% vs. 28%, P=0.03).

Conclusion: The findings of the present study showed a higher prevalence of metabolic syndrome and high levels of fasting and two-hour post-meal blood sugar indices, as well as higher cholesterol and triglyceride levels in patients with bipolar disorder compared to healthy individuals. According to the above findings, it is recommended that patients with bipolar disorder be examined for metabolic disorders such as diabetes and dyslipidemia with the discretion of the attending physician, and the necessary training to modify the lifestyle to prevent the occurrence of the disease. Metabolic drugs should be provided to these patients.

Key words: Metabolic syndrome, bipolar disorder, Ardabil, Metabolic disorder