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Poster Presentation

Depression and the Relation of These Symptoms with Plasma Cortisol Level in Individuals Dependent and Independent to Methamphetamine, a Cross-Sectional Study

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Abstract

Methamphetamine is a psychostimulant drug that is highly addictive and causes epigenetic changes that is associated with symptoms of depression. The aim of the present study is comparing age and gender differences in individuals dependent and independent to methamphetamine and examining the relation of depression with the level of cortisol. In a cross-sectional study, 55 methamphetamine users with diagnosis of depression (29 men and 26 women) and also 65 non-users depressed patients (30 men and 35 women) among who referred to three stimulant treatment centers in Tehran were selected using purposeful sampling method and were assigned into four groups. Evaluating the level of plasma cortisol hormone was done using radioimmunoassay method (RIA) and depression symptoms were evaluated using Depression Questionnaire. Data were analyzed using chi-square test, multivariate variance analysis and Pierson correlation. The results showed the level of cortisol in two groups of male and female Meth users was higher than two groups of non-users ($P<0.05$). Also, there is a significant relationship between the level of cortisol and depression in Meth users ($P< 0.05$). This relationship is stronger in women than men. Also, age index in users had lower than two groups of non-users ($P<0.05$). The findings of the present study can be useful in the process of preventing and treating addiction. Using chemotherapy in creating changes in cortisol levels with the aim of controlling usage relapse can be an appropriate path for future researches in this field.

Keywords: Depression, Plasma Cortisol Level, Methamphetamine

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