

STEROID HORMONES LEVELS IN ALCOHOL DEPENDENT PATIENTS UNDER CONDITIONS OF SOCIAL ISOLATION

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According to literature data, steroid hormones are involved in development of aggressive behavior. In addition, it is shown that alcoholism is associated with alterations in the activity of hypothalamic-pituitary-adrenal axis during chronic alcohol consumption and in withdrawal period as well.

Objective: The research aims to investigate the correlations between steroid hormones level alterations and aggression level among alcoholic patients under conditions of social isolation.

Material and methods: Serum levels of cortisol and testosterone were measured in alcohol dependent males with aggressive behavior (n=60) and in alcohol-dependent non-aggressive males (n=27) being under conditions of social isolation. The control group consisted of 24 alcoholic patients during alcohol withdrawal. The hormone serum levels were measured with ELISA method. Statistical processing of results was carried out with software package SPSS for Windows.

Results: In comparison with the control group, increase of cortisol concentration in patients under conditions of social isolation has been observed. Patients with aggressive behavior have shown the trend toward cortisol level increase as against non-aggressive alcohol-dependent males. Concentration of testosterone in the investigated groups did not differ from the one of control group.

Conclusions: Increase of cortisol level in the investigated groups is apparently a consequence of influence of the factor of social isolation, but also it might be associated with aggressiveness tendency of alcoholic patients. Steroid hormones may play a significant role in aggressive behavior of alcohol-dependent patients in the conditions of social isolation.