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Antidepressive activity of 2-oksoindolin-3-glycolic acid derivatives in Numero’s test

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In Ukraine there is a tendency to increase the place of mortality and morbidity
of humanity. Depressive disorders are nuded in pharmocorrection. It testifies the
novelty of this problem and necessity of new effective antidepressants (Maruta N. O.
and co-authors, 2011).

The aim of the paper is to study the changes of conduct of animals in
Numero’s test under the influence on 2-oksoindolin-3-glycolic acid derivatives.
Screening of 23 derivatives of 2-oksoindolin-3-glycolic acid was provided on the
mice. It was given in the close of 12 mg/kr in comparison with imipramine (25
mg/kr). It was done intracavitary per 1 hour to the test. Control group was given
solvent with emulsifying agent. Depressive changes of conduct were estimated in
Numero’s test, the duration is 10 min. The number of the wheel’s movements was
registered for the first minute and for the last five ones. It was indicated, the intake of
5 derivatives of 2-oksoindolin can increase the number of wheel for the first minute.
The last five minutes of test can increase only 3 substances, but 4 derivatives of 2-
oksoindolin can deteriorate the results of control group.

The given results testify, that substances of 2-oksoindolin-3-glycolic acid show
antidepressive activity and are perspective for the detailed analysis with the aim of
creating pharmacological preparation.