EFFECT OF HYPERICUM PERFORATUM AND CHISANDRA CHINENSIS ON PSYCHOPHYSICAL STATE UNDER EXPERINENTAL NEURASTHENIA

Krasnoshchok A. A., Zagayko A. L.
National University of Pharmacy, Kharkiv, Ukraine
biochem@nuph.edu.ua

Introduction. The World Health Organization declared the 21st century as the depression epidemical. Depression is ranked first in the world among the causes of absenteeism and the second - among the diseases leading to disability (annually about 150 million people). In 60% of cases it is the cause of depression is suicide. 50% of Ukraine's population suffer from borderline states (all sorts of neuroses). Neurasthenia (F48.0) is the most common form of such states. Neurasthenia is a mental disorder from the group of neuroses, which manifests itself in increased irritability, fatigue, loss of the long-term mental and physical stress adaptation ability. There are three stages of neurasthenia: hypersthenic neurasthenia, irritable weakness and hyposthenic neurasthenia. Each of which has features in therapy.

Aim. Studying the influence of plant originating drugs (based on Hypericum perforatum and Schisandra chinensis), in the psychophysical state when hyposthenic neurasthenia. As well as the consideration of the feasibility of their combined use.

Materials and methods. The experimental study was performed on the pre-selected 24 white rats (145-185g, 5 months, male). Hyposthenic neurasthenia modulated by keeping in a confined space for 21 days. Rats were divided into 6 groups. 1) control; 2) given Hypericum perforatum; 3) given Schisandra chinensis; 4) given Hypericum perforatum and Schisandra chinensis; 5) given Schisandra chinensis daily dose in the morning and daily dose of Hypericum perforatum in the evening; 6) given a single dose of Schisandra chinensis in the morning and a single dose of Hypericum perforatum in the evening. (The dose calculated in terms of a therapeutic dose for humans). The calculated doses were administered intragastrically in 1 ml of water twice daily. The control group received the appropriate amount of water. The final results obtained in the "open field" tests, swimming according to Porsolt and swimming with the additional load.

Results and discussion. Based on these data statistically significantly better ratio of locomotor activity to cognitive activity in group Schisandra and group Schisandra combination Hypericum compared with a group of Hypericum. Also the groups with Schisandra showed the better results of physical endurance in swimming experiment with additional weights 10%.

Conclusions. The combined use of Schisandra chinensis and Hypericum perforatum looks quite promising and needs more detailed investigations.