PROSPECTS OF USE OF THE EXTRACTS OBTAINED FROM THE FRUITS OF THE EUROPEAN PLUM AS LAXATIVE DRUG WITH HEPATOPROTECTIVE PROPERTIES

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Introduction. Finding drugs that normalize the motor-evacuation function of the digestive tract (prokinetics) has attracted the attention of medical researchers for several centuries, as impaired motility underlie the pathogenesis of many diseases, such as gastroesophageal reflux disease, hepatitis, gastric ulcer, irritable bowel syndrome (IBS), cancer, etc.

The aim of the research. In this context, our attention was drawn to European plum, which is widely grown in the territory of our country and is well known for its medicinal properties and applications in folk medicine.

Materials and methods. The subjects of the study were extracts obtained from plum fruits: aqueous extract (EC-1), alcohol extract (EC-2), dry extract containing fibers (SEV), dry extract with polysaccharide complex (SEPC).

Results. In the study of the laxative effect of four extracts of fruits of European plum (EC-1; EC-2; SEV; SEPC) on the ability to influence the intestinal peristalsis of mice experimentally substantiated the greater laxative activity in the model of loperamide-induced constipation in 75 mg / kg of SEV extract (26 %) and SEPC extract at a dose of 50 mg / kg (22 %), which exceeded the activity of the comparator "Picolax" at a dose of 0.3 ml / kg (18 %); and on the model of peristalsis disturbance with barium chloride - the activity of SEV extract at a dose of 200 mg / kg (29 %), exceeded the maximum activity of SEPC extract at a dose of 100 mg / kg (26 %) and the drug comparison "Picolax" at a dose of 0.3 ml / kg (27 %).

Conclusions. The analysis of the experimental data showed the presence of “Prunofit” extract at a dose of 200 mg / kg moderate laxative effect, which is mainly due to increased intestinal motility, and the ability to stabilize the functional state of the liver.

These effects of the test extract were found in the treatment of constipation against subacute liver injury and were not inferior, and in some cases even outweighed the effects of complex treatment with laxative and hepatoprotective reference drugs. Importantly, “Prunofit” extract, unlike “Senadexin”, did not cause diarrhoea in animals after release of its effect, which could be a beneficial feature of this medicine in further in-depth study.

“Prunofit” extract has demonstrated that it may be a promising alternative replacement for combined complex treatment with herbal remedies and hepatoprotectors, which will help to avoid polypragmasia in the treatment of comorbid conditions in gastroenterology associated with functional constipation and disorders of the functional state of the liver.