



EXPERIMENTAL STUDIES TO STUDY THE SPECIFIC ACTIVITY OF THE CHOLERETIC COLLECTION

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Article Received on 20/10/2022

Article Revised on 10/11/2022

Article Accepted on 30/11/2022

ANNOTATION

The risk of chronic diseases of the biliary tract is increasing, and in developed countries this is given special attention. Of particular interest are choleric herb medicines in the domestic market. It is noted that the need for them is increasing. This study is devoted to the definition of the main groups of biologically active substances of the developed compositions of multicomponent collections obtained from local plant materials. The specific activity of the tested preparations "Stigmachole" was studied. The experiments were carried out on white mice weighing 18-20 g of both sexes. The data obtained were statistically processed using the STATISTICA program. The study comparators were administered intragastrically at a dose of 10 ml/kg. The mice were decapitated under light anesthesia, the livers were exposed, and the bile ducts were ligated. The gallbladder was dissected from the bile ducts and weighed after bile removal. The mass of bile in the gallbladders of experimental and control mice was determined by the difference in mass. According to the results of the experiment it was found that with the introduction of an infusion of choleric collection No. 3, it increased the mass of bile by 4.48 times compared with the control group, i.e. has a pronounced choleric activity and is recommended for further study as a choleric agent. The results show the prospect of creating new choleric agents based on local plant materials and introducing them into domestic pharmacy.

KEYWORDS: Specific activity, choleric collection, infusion.

In the republic, special attention is paid to the development of the pharmaceutical industry, expanding the range and providing the population with effective, high-quality, safe and import-substituting medicines. The priority is the development of new innovative herbal medicines using local resources and implementation them in the domestic industrial pharmacy.

According to the World Health Organization, in recent years, two-thirds of the population suffer from diseases of the biliary tract, and in developed countries this is given special attention. In the last decade, there has been an increase in such cases, and only in the countries of the Commonwealth of Independent States annually suffer from diseases of the biliary tract from 500 to 1 million people.

Currently, choleric and hepatotropic herbal medicines are of particular interest, and the demand for them is growing in the domestic market.^[1]

Relevance. According to the World Health Organization, in recent years, the risk of chronic biliary tract diseases has increased, and in developed countries this is given

special attention. It is important to use compositions based on local plant raw materials, which have a high therapeutic activity due to the synergism of the biologically active substances contained in them. In this regard, special attention is paid to the creation of multicomponent collections, the definition of the main groups of biologically active substances and their introduction into medical practice. It is also relevant to provide the population with safe, effective medicines obtained from local plant materials.

In world practice, large-scale research is being carried out to develop easy-to-use medicines and biologically active additives based on the complex use of medicinal plants that exhibit high therapeutic activity due to the synergism of biologically active substances contained in them. In this regard, the creation of multicomponent collections, the definition of the main groups of biologically active substances, the determination of their activity, the creation, development of technology and their introduction into production.

Purpose of the study. The study of the specific activity of choleric preparations of the developed compositions from medicinal plants of local origin.

Materials and methods: the specific activity of the tested collections of "Stigmachole" developed various compositions.^[1,2,3,4] from medicinal plants was studied: rose hips - FS-42-Uz-0209-2017 (*Fructus Rosae* - have anti-inflammatory and choleric effects); small-flowered oregano herb -FSP-42-Uz-15842845-2249-2021 (*Herba Origani tythanthi* - antispasmodic, secretolytic, analgesic, diuretic, choleric effect); common yarrow herb - FS-42 Uz-0256-2018 (*Herba Achilleae millefolii* - anti-inflammatory, antimicrobial, antispasmodic, choleric); columns with stigmas of corn - FSP-42 Uz-15842845-2301-2018 (*Styli cum stigmati Zeae maydis* - activate the gallbladder, speed up the metabolic process. The used medicinal plant material has an official registration status in the republic.^[2,3]

Compositions of charges are developed Department of Industrial Technology of Medicines of the Tashkent Pharmaceutical Institute.

The experiments were carried out on white mice weighing 18-20 g of both sexes.

The animals were deprived of food 30 h before the start of the experiment. The study comparators were administered intragastrically at a dose of 10 ml/kg. After 60 minutes under light ether anesthesia, the mice were decapitated, an abdominal incision was made, the liver was exposed, and the bile ducts were tied with silk thread. The gallbladder was carefully dissected from the bile ducts, removed from the abdominal cavity and weighed on a torsion balance. After that, the bile contained in it was removed, the gallbladder was washed in distilled water, dried on a paper filter and weighed again. The mass of bile in the gallbladders of the experimental and control mice was determined from the difference in mass.^[4]

The obtained data were statistically processed using the STATISTICA program for Windows 95.^[5]

Experiment results show that with the introduction of infusion of choleric collection No. 1 at a dose of 10 ml/kg, the mass of bile increased by 3.3 times compared with the control group.

In the group of animals treated with an infusion based on choleric collection No. 2, the mass of excreted bile in animals was 2.9 times greater than in the control group.

The introduction of infusion collection No. 3 increased the mass of bile by 4.48 times compared with the control group.

And the introduction of an infusion based on choleric collection No. 4 increased the mass of bile by 3.48 times compared with the control group.

The results obtained show that collection No. 3 has a more pronounced choleric effect (Table 1).

Table 1: The study of the choleric activity of collections №№ 1, 2, 3, 4 (M±m; n=6).

Groups	Quantity animals	excreted bile, mg
Control	6	7.58±0.59
Gathering 1	6	25.22±3.03*
Gathering 2	6	22.17±2.33*
Gathering 3	6	33.97±3.16*
Gathering 4	6	26.38±2.08*

Note: * - the difference in the reliability index at P <0.05 in comparison with the control indicators.

CONCLUSION

Thus, the study of the specific activity of collections Nos. 1, 2, 3, 4 showed that collection No. 3 (columns with stigmas of corn - 40 hours, rosehips - 20 hours, oregano grass - 20 hours, yarrow grass - 20 hours) has a pronounced choleric activity and is recommended for further study as a choleric agent. The results of the study showed the prospect of creating new choleric agents based on compositions obtained from local plant materials and introducing them into domestic pharmaceutical production practice.

LITERATURE

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