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Effect of the Drug Phytoferon on Liver Function

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Abstract: The rapid development of the field of pharmaceutical today in our country is further increasing the demand for the large-scale production of drugs based on domestic raw materials. The main focus in this is on drugs derived from medicinal plants. Medicines from natural plants are more harmless to the body than synthetic medicines [1,2,3].

Base phrases: hepatitis, monooxygenase, phytopheron, hexenal, narcosis, enzymes.

Pharmacological, biochemical, physiological, hematological, immunological and Toxicological Methods were used in the study of the pharmacological activity of the plant collection with the studied antianemic effect and its bullying.

Currently, a huge number of antianemic drugs have been introduced into medical practice. But these drugs did not meet the demand of clinicians treating patients. Because most of these drugs are brought from abroad, first of all, and they are sold at high prices, and these drugs, in addition to having a high therapeutic effect, cause various side effects, as a result of which large-scale use of them is limited to a certain extent, many of these drugs have a symptomatic effect, and after the cessation of.

Therefore, the development of new medicines made from local medicinal plants and their introduction into the field of Medicine are considered to be important tasks.

The purpose of the work: to study the antitoxic effect of the collection "Phytopheron", consisting of medicinal plants, on the liver in experimental animals.

Experimental method: Hepatoprotector effects of Phytopheron in the liver were studied in laboratory mice with a weight of thirty-22-24 grams. The effect of the drug phytoferon on liver function was determined by studying bile separation from it as well as the duration of sleep in the acute hepatitis model. In this, mice were administered orally tetrachloromethane CCl_4 times in 10 ml/kg of a 50% solution in sunflower oil. Mice in the experiment were administered the drug phytoferon in doses of 5 and 10 ml/kg for 3 days from 1 time on each day. In the norm and after the administration of the drug, the duration of etching was observed. The sleep process was brought to the surface by injecting them with the drug hexenal. After 12 hours (Renaissance), the experimental animals were lifeless against the background of light narcosis. The activity of enzymes was tested using biochemical methods.

The effect of the drug on gallbladder excretion was studied using the determination of the masses of the gall bladder, which was isolated by giving it once orally, and after 3 hours the mice in the experiment were lifeless against the background of mild narcosis. The effect of the liver against cytolysis is determined by determining the activity of liver-specific enzymes, the effect on pigment metabolism is determined by determining the amount of bilirubin in the blood serum.

Serum biochemical analyzes were considered using common methods adopted in clinics. Standard Nabors were used in this.

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Experimental results: it is known that in acute liver poisoning (acute hepatitis), monooxygenase enzyme activity in hepotacite cells is impaired. For this reason, even under the influence of acute hepatitis, the sleep time has changed significantly compared to normal. That is against the background of liver intoxication, intact increased by 2.5 times in the control group in relation to animals. As a result of 3 days of treatment with the drug phytoferon, the time of "sleep released to the surface with hexenal" decreased at the level of mathematical accuracy compared to the control group (Table 1). In particular, it was noted that exposure to the drug in the amount of 5 ml/kg decreased from 84±8.7 to 31.5±6.92 x, and at 10 ml/kg - 30.7±6.74 x (Table 1).

Table 1. Effects of phytoferone on sleep duration in acute toxic hepatitis

(M ± m, n = 10)

Specification	Intact Group	Control group	Experimental group	
			Phytoferon 5 ml/kg	Phytoferon 10 ml/kg
Hexenal-influenced Sleep	33,612±4,1234	84±8,778*	31,656±6,923^{x}	30,8±6,79^{x}
AlT	40,698±4,2112	76,6±3,453*	71,12±5,5998*	70,4±6,6* ^{x}
AsT	30,1323±3,2199	37,34±8,32*	30,6±5,2 ^{x}	29,6±6.09* ^{x}
Bilirubin, mmol/l	3,86±0,4132	4,92±0,2923*	4,2±0,49 ^{x}	4,16±1,07 ^{x}

- Reliability level according to R<0.05 compared to intact haivon group indicators; reliability level according to R<0.05 compared to X-control group indicators.

Also, the drug practically did not affect the cytolysis process. That is, no significant changes in serum AST and total bilirubin levels were detected. Alt levels, on the other hand, were noted to have increased SSI exposure from 40.7±4.2 to 76.5±3.45, with amounts of 5 ml/kg, 10 mg/kg hardly different from control group indicators even when exposed to the drug (Table 1).

Therefore, in the amounts studied under the action of the drug phytoferon, the enzyme activity of liver monooxygenase increases. As a result, the hepatoprotectors, that is, the protective effect of the liver, also increase.

Subsequent experiments (in intact animals) investigated the effect of Phytopheron Assembly on bile separation.

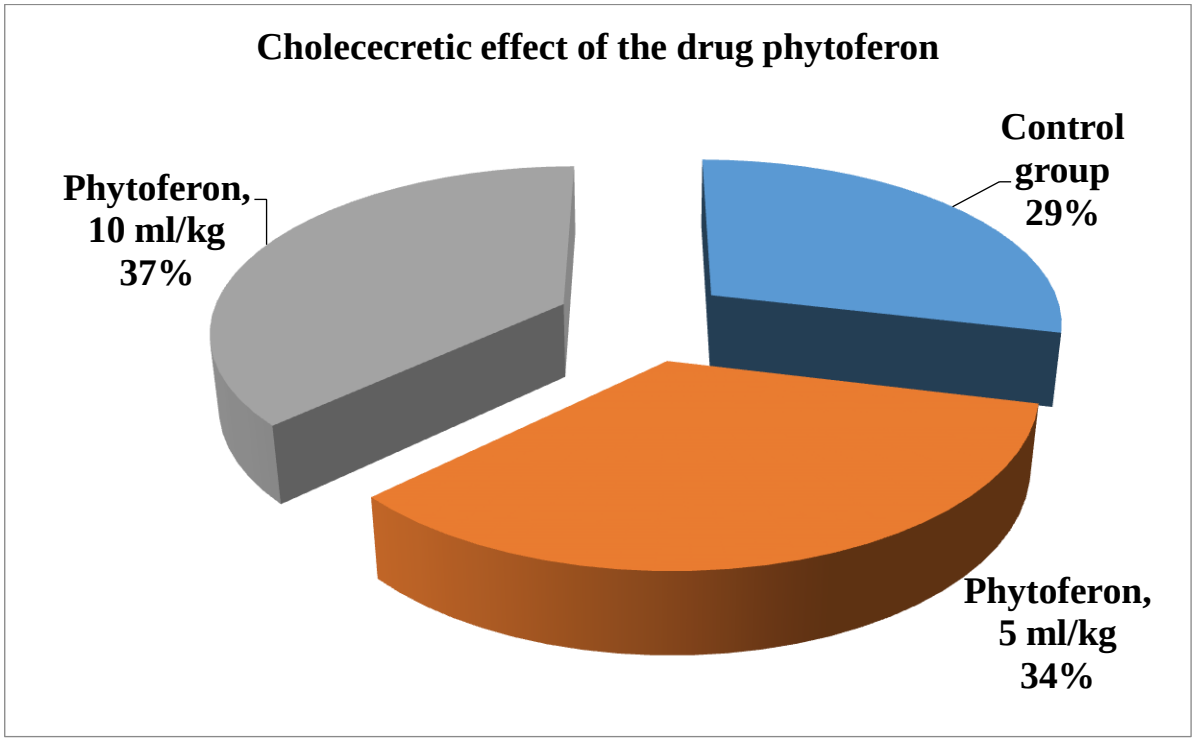
In the first series of experiments, the effect of Phytopheron on bile separation was studied in intact animals. The animals in the experiment were divided into 3 groups of 10:

The 1st Group, a control group, was sent water that was dispersed to suit them.

Group 2, an experimental group, was given a dose of 5 ml/kg of phytopheron tincture,

Group 3, an experimental group, was administered phytopheron tincture at doses of 10 ml / kg

The collection of plants under study Phytoferon was given once orally. 3 hours after the phytopheron was given, the mice in the experiment were lifeless by the method of decapitation against the background of mild narcosis, and the mass of the gallbladder was measured. The results obtained (diagram 1) were given.



As shown in the diagram phytoferon at the doses studied, intact increases the herbivory of animals at a level of mathematical accuracy. That is, a 5 ml/kg increase in grass separation by 19% compared to control group indicators, and 29% respectively at 10 ml/kg. Therefore, phytopheron intact enhances the process of separation of grass from animals.

On the basis of the above data, it can be said that phytopheron thymicolyenal has a positive effect on the immune system, accelerating the body's immune system.

Thus, the phytoferon under study can be said to have a high degree of Fire drive and hepatoprotector effect. The hepatoprotective effect of phytopheron occurs due to the increased antitoxic effect of the liver and the acceleration of the body's immune system, which causes it to occur in the case of hepatic intoxication caused by Ccl4.

Conclusion:

1. The drug phytoferon enhances hepatoprotective property of the liver in acute toxic hepatitis in amounts of 5 ml/kg and 10 mg/kg, increasing monooxygenase enzymatic activity.

2. The drug phytopheron stimulates cholecretory activity, significantly increasing the excretion of bile fluid from hepatocyte cells of intact animals in amounts of 5 ml/kg and 10 mg/kg.

Literature:

1. Kamolov M, Raxmonkulov U. Gepatit kasalligini davolashda ishlatiladigan Uzbekistonning dorivor o'simliklari . O'zbekcha Biologik Jurnallar to'plami:T: 2001. - №2. - C. 86-89.
2. Allaeva M.J. "Qon tizimiga ta'sir etuvchi Kogistin, ferask, Stiflos va mumiyo preparatlarining farmakologiyasi"., Tashkent, 2013 - s. 6-10.
3. Адекенов С.М. Направленный поиск цитопротекторов растительного происхождения Фармация Казахстана. – Алма-Ата, 2004.- Спец вып.-сент.- С. 4-9.
4. Туляганов Р.Т. "Фармакология нового гепатопротектора гепатин и желчегонного сбора Бозорова".-Афтореф. дисс. на соискание докт. биол.наук.-Ташкент,2009.-34 с.

5. Влияние суммарного природного препарата из живучки туркестанской на активность монооксигеназ печени при ее поражении четыреххлористым углеродом /Захидов У.Б., Набиев А.Н., Хушбактова З.А. и др. //Узбекский биологический журнал - Т.,- 2000. - №4. - С. 8-10.
6. Abdusamatov A.A., G'ulamova S.A. Eksperimental gepatitda fitat kobalt va silibor moddalarining antioksidant tizimni fermentlari faolligiga ta'siri // materiali nauchno-prakt. konf. "Aktualnie problemi obr*azovaniya, nauk i proizvodstva v farmasii" - Tashkent, 2005. –S. 235-256.*