



ESSENTIAL CLASSIFICATIONS OF HEPATOPROTECTIVE MEDICINES

Irgasheva Sanobarkhan Umarjonovna

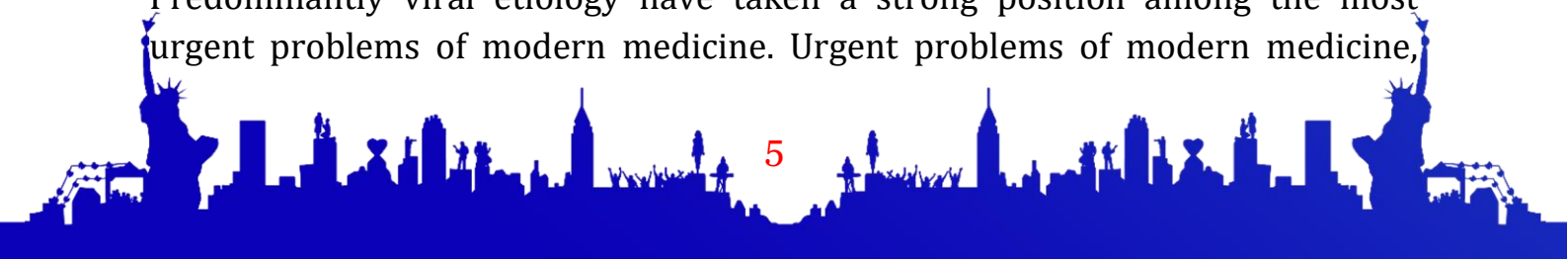
Associate Professor,
Department of Pharmacy and Chemistry,
Faculty of Medicine, ALFRAGANUS University
s.irgasheva@afu.uz
<https://doi.org/10.5281/zenodo.14783826>

Annotation. This article presents an overview of the main medications and natural remedies used in hepatobiliary system pathology. Classification of hepatoprotectors by mechanisms of their action is reflected, and indications for the use of the main groups of these drugs. Special attention paid to a large group of plant hepatoprotective agents, the mechanism of their action in accordance with their chemical composition. In accordance with their chemical composition. Tables of medicinal plants, dietary supplements, on hepatoprotective and choloretic action, because of clinical and experimental studies.

Key words: hepatoprotectors, flavonoids, phospholipids, lipid peroxidation, lipids, liver

Introduction. Hepatoprotectors are drugs or combinations of drugs that used to increase the liver's resistance to damaging factors, prevent or reduce disruption of the organ's structure and function. Modern principles of treatment of liver diseases include two main directions. The first is to eliminate the cause of the disease, such as antiviral therapy for viral hepatitis. The second is to slow down the destruction of the organ, restore the structure and work of cells. For this purpose, hepatoprotectors are used. Despite the fact that the causes of hepatic pathology are diverse, doctors' claim that most chronic liver diseases progress by the same mechanisms. It all starts with the stage of damage; with impaired bile outflow through intrahepatic and extrahepatic bile ducts, then inflammation, fibrosis, cirrhosis and hepatic cell failure occur. That is why hepatoprotectors indicated in different liver diseases and should act on all these mechanisms, especially on fibrosis, as the stage of the disease depends on its severity.

Most often-liver damage realized through chemical and immunological mechanisms. In recent decades, diffuse liver diseases of predominantly viral etiology have taken a strong position among the most common liver diseases. Predominantly viral etiology have taken a strong position among the most urgent problems of modern medicine. Urgent problems of modern medicine,



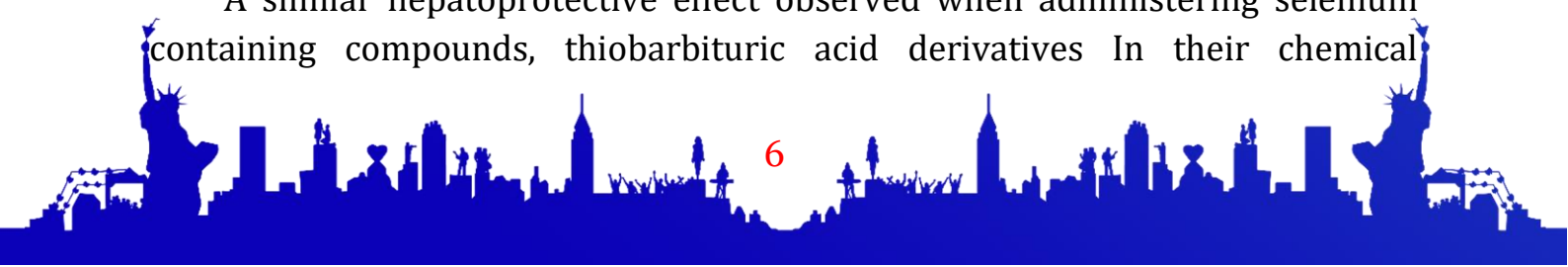


because they reduce the quality of patients, lead to disability. In recent years, the knowledge in the field of etiology, immunogenesis knowledge in the field of etiology, immunogenesis, and pathmorphology of these diseases considerably expanded in recent years. Possibilities of diagnostics and specific prophylaxis. The most difficult and far issue of therapy of patients with acute and chronic viral hepatitis (VH) remains the most difficult and far from being solved. Hepatitis (VH), steatohepatitis of alcoholic and non-alcoholic etiology. In accordance with modern principles of treatment of liver diseases, the program of complex therapy of such pathology includes two main directions. The first represents etiotropic therapy aimed at suppressing the pathologic pathogen, its elimination and sanitation of the body. In clinical practice etiotropic therapy used only in viral hepatitis with parenteral mechanism of infection.

The second direction corresponds to pathogenic therapy, aimed at adequate pharmacological correction of universal, multifactorial and multitemporal links of pathogenesis. It should be noted that universalism of the main links of pathogenesis of various liver lesions and allows to polyetiologic character of this pathology to use rather close pathogenetic therapy. Pathogenetic therapy, the basis of which may be drugs with a targeted action on hepatic cells when discussing the pathogenetic therapy of HBV, it is necessary to consider the general provisions and some features in acute and chronic infections. Some peculiarities in acute and chronic infections. In acute HBV, signs of liver dysfunction detected in the midst of the disease, and their severity correlates with the severity of the course of the disease. Liver and the degree of their severity correlates with the severity of the course of the disease.

Despite the presence of diffuse liver damage, cytolysis and dystrophy of hepatocytes in the majority of cases, the disease is mild. The majority of cases of diseases occur in mild and moderately severe forms, that due to the enormous compensatory-adaptive capabilities of this both this organ, as well as systems and the whole organism. For example, HAV is an acute, self-limiting disease, characterized by a benign course, and in the majority of cases represented by mild low-symptoms. Most cases represented by mild, asymptomatic forms. Mild forms VH essentially do not need drug therapy. The main task of therapeutic measures is to create optimal conditions for sanogenesis and repairing. This achieved by limiting various loads on the liver as an organ involved in metabolism detoxification, digestion and regulation of metabolic processes.

A similar hepatoprotective effect observed when administering selenium containing compounds, thiobarbituric acid derivatives In their chemical





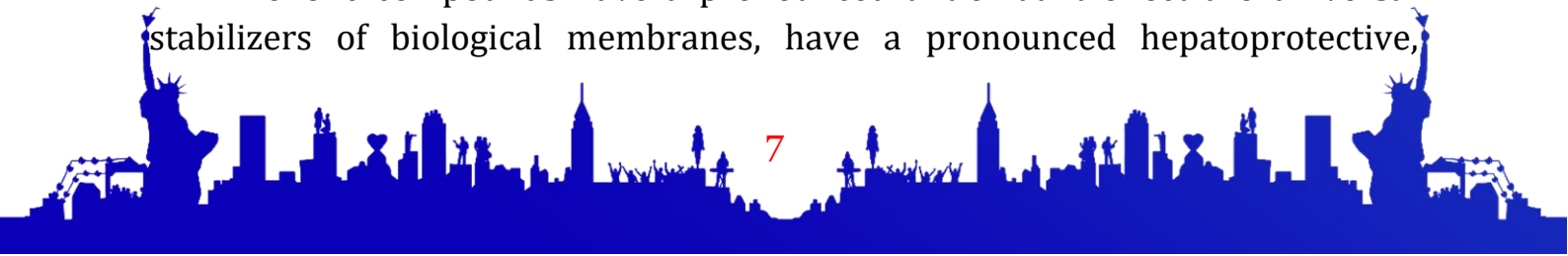
structure, phospholipids are similar to triglycerides, but in their molecule, one of the fatty acids is replaced by a phosphoric acid residue. The main phospholipids are lecithin (phosphatidylcholine), phosphatidylethanolamine, phosphatide inositol, phosphatidylserine, phosphatide acid.

Phospholipid preparations, being a constituent part of cytoplasmic membranes of the

Cell's membranes, contribute to the restoration of the structure, replace defects of the damaged lipid layer of biological membranes and restore its physicochemical properties.

The most well-known and long-used hepatoprotector is essential, a complex preparation containing diglycerine esters of choline phosphoric acid. It prevents inflammation, necrosis of hepatocytes, decreased mitochondrial and endoplasmic reticulum enzyme activity, reticulum, lysosomes. These drugs stimulate antitoxic function of the liver; prevent inactivation of cytochrome P-450. Essential, unlike other hepatoprotectors to great extent activates reduced glutathione conjugation xenobiotic. The hepatoprotective mechanism of action of this group of drugs determined by stimulation of RNA polymerase activity and ribosomal protein synthesis in hepatocytes, as well as antioxidant effect. This group of compounds used as the most effective hepatoprotectors in clinical practice. The use of medicinal plants with a high content of flavonoids, contributes to the inhibition of LPO processes, prevents the development of dystrophy, necrosis of hepatocytes, hyperfermentemia and cholestasis. The same group of drugs used as effective choleric agents with a favorable effect on the functional state of the liver. Another class of biologically active substances with hepatoprotective effect are saponins: derivatives of glycyrrhizic acid, which used in the treatment of chronic hepatitis. Currently used in the treatment of chronic hepatitis (glycyram, glycyrrhizin in the form of aqueous extract from licorice roots, saponin B2)]. There is data on the anti-hepatotoxic effect of various plants – lemongrass Chinese and other representatives of the Magnoliacea family, ginseng preparations, Asian yarrow, celandine, bitter wormwood, mugwort, mugwort mellifera, clover lupine, alfalfa. Many herbal remedies are categorized as hepatoprotectors, although their biologically active substances are not sufficiently studied their biologically active substances. Hepatoprotective effect of many. Planted preparations researchers attribute to the action of substances of phenolic nature.

Phenolic compounds have a pronounced antioxidant effect are universal stabilizers of biological membranes, have a pronounced hepatoprotective,





hepatoprotective, hepatoprotective, pronounced hepatoprotective, antispasmodic, anti-inflammatory.

Angioprotective actions. A significant advantage of phenolic BAS over other classes of natural compounds is their low toxicity (marigold medicinal, maakia Amur, astragalus sainfoin, and late serrated bison). Antioxidants of plant origin include food plants: artichoke, radish juice, garlic extract, rice bran, carrot aqueous extract, sunflower seeds, and soybeans. Preparations containing artichoke extract include. Hepar SL, Carminagal, Hevehol. Based on plant phospholipids developed domestic drug phospholiv, comprehensively studied eplir, hepatoprotective agent of phospholipid nature. Phospholipid means of phospholipid nature, obtained from mud, which is a lipid extract containing phospholipids and carotenoids.

In conclusion. Thus, in hepatology, phospholipid preparations considered one of the most effective variants of hepatoprotective substances. Complex preparations contribute to a more rational use of herbal. This review of the literature shows that out of the total number of works on creation and application of hepatoprotectors, most of them are devoted to the study of means of plant origin. The reason for this is high harmlessness, expressiveness of action, availability of sources of obtaining, cost-effectiveness. Along with this insufficiently studied the possibility of using means of mineral and animal origin of natural sources (local resorts) as hepatoprotectors. In pathogenetic therapy of chronic liver and gallbladder diseases. The complex of therapeutic and prophylactic treatment is important a complex of therapeutic and prophylactic measures is of importance: diet therapy, regimen of labor and rest, efficiency of medical examination at the outpatient stage, informing the patient about etiopathogenesis of the disease. It is necessary among the means pathogenetic therapy in addition to herbal natural remedies to use other natural factors, such as sanatorium-resort treatment, used among the means of pathogenetic therapy in addition to herbal natural remedies.

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