

**THE IMPORTANCE OF THE USE OF CARDIAC GLYCOSIDES IN THE  
TREATMENT OF DISEASES**

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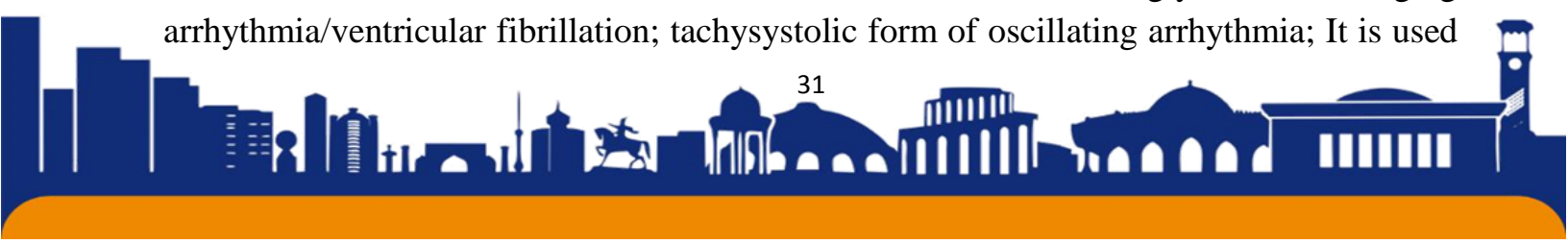
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**The purpose of the research:** to study the composition of cardiac glycosides and their effect on the body.

**Research materials and methods:** This research was carried out using the methods of monitoring patients and comparing their clinical and laboratory examination results, applied to patients with heart failure. Cardiac glycosides are natural glycosides obtained from plants. Since ancient times, people have used plants with cardiac glycosides and their crude extracts as bullet casings, murder or suicide, rat poisons, cardiac tonics, diuretics, and emetics, primarily because of the toxicity of these compounds. used. To them, for example, the ancient Egyptians used sea onion, the Romans and Greeks used erysimum for heart diseases and as a diuretic. Currently, digoxin, selenide, lantoside from the leaves of anguilla; strophanthin K from strophantus seeds; adonis, adonisbrom from the above-ground part of the adonis plant; medicinal preparations such as corglycon and konvaflavin are obtained from the surface of the pearl flower, and they are widely used in modern medicine in the treatment of heart diseases, as diuretics, etc. Cardiac glycosides have long been the mainstay of treatment for congestive heart failure and cardiac arrhythmias due to their effects of reducing heart rate and increasing muscle contraction. Heart failure is characterized by the inability to supply the body with blood, or its contractile force decreases even with a decrease in blood volume. Cardiac glycosides should be prescribed selectively based on their pharmacokinetic properties, taking into account the functional state of the liver and kidneys, the amount of protein in the blood plasma, age and other factors. Even when there is a need to administer strophanthin and digoxin in patients with kidney failure, the loading and maintenance doses of the drug are corrected taking into account creatinine clearance. Indications for the use of cardiac glycosides: swinging arrhythmia/ventricular fibrillation; tachysystolic form of oscillating arrhythmia; It is used



as the main drug in supraventricular paroxysmal tachycardia. Thus, in the treatment of this condition, cardiac glycosides are mainly used because they have 3: positive inotropic, negative chronotropic and neuromodulating pharmacodynamic effects. According to the solubility of cardiac glycosides: polar (hydrophilic), non-polar (lipophilic) and mixed (hydrolipophilic). According to the duration of action: short-acting - strophanthin and corglucon 1-3 days; moderately effective - digoxin and selenide for 5-8 days; long-acting - digitoxin and acetyldigitoxin are used for 14-21 days. Commonly used cardiac glycosides, such as digoxin and digitoxin, deal with the latter due to their positive inotropic activity. Cardiac arrhythmias, on the other hand, are changes in heart rate that are faster (tachycardia) or slower (bradycardia). Drug treatments for this condition primarily combat tachycardia or atrial fibrillation by slowing the heart rate, such as cardiac glycosides. However, due to questions regarding toxicity and dosage, cardiac glycosides are being replaced by synthetic drugs such as ACE inhibitors and beta-blockers and are no longer used as primary medical treatment for such conditions. Depending on the severity of the condition, they may still be used in combination with other treatments.

**Research results:** The pharmacokinetics, pharmacodynamics, duration of action, indications and changes in the patient during administration of cardiac glycosides were written.

**Conclusion:** The tests showed that cardiac glycosides have a calming effect on the central nervous system, normalize the processes of excitation and inhibition. In the treatment of cardiovascular failure, digoxin is currently used more than other drugs. Digoxin treatment begins with maintenance doses.

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