

## **INFLUENCE OF THE AMOUNT OF HERBAL EXTRACTS ON THE COURSE OF GASTRIC ULCERS CAUSED BY NSAIDS**

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**Abstrakt:** In Experimenten an weißen Ratten wurde die Antiulcus-Aktivität der Summe von Extrakten aus Heilpflanzen (St. Es zeigte sich, dass unter experimentellen Bedingungen die Summe der Extrakte von Heilpflanzen (St. Durch diese Eigenschaft ist es dem bekannten Glycerol-Regenerationsstimulator um ein Vielfaches überlegen und als Antiulcusmittel von praktischem Interesse.

**Schlüsselwörter:** indomethacin ulcer, St. John's wort, licorice, mediasia, ziziphora, glyceram, antiulcer activity

**Anotation:** In experiments on white rats, the antiulcer activity of a new collection of extracts of spice herbs with the induction of indomethacin dystrophy of the gastric mucosa in rats was studied. It was found that under experimental conditions, lesbochol has a distinct antiulcer effect in indomethacin gastric ulcer. By this property, it is several times superior to the well-known regeneration stimulant glycerama and is of practical interest as an antiulcer agent.

**Keywords:** indomethacin ulcer, hypericum, glycyrrhiza, mediasia, zizphora, glycyram, antiulcer activity.

### **Relevance**

Non-steroidal anti-inflammatory drugs (NSAIDs) have anti-inflammatory, antipyretic, analgesic and antithrombotic effects. Such a range of positive effects is not simultaneously observed in any other group of drugs, including glucocorticoids. They occupy a leading position in terms of consumption by the population, which is explained by their high efficiency in the pain syndrome of inflammatory origin. In the world, more than 30 million people daily take

NSAIDs, and in 2/3 of cases - without a doctor's prescription and supervision. However, the use of NSAIDs has limitations - in particular, the ulcerogenic effect that develops as a result of long-term use of NSAIDs. In this regard, the problem of tolerability and safety of NSAIDs is particularly acute. Up to 60% of hospitalized patients with gastric bleeding indicate prior use of NSAIDs. Rheumatologists often refer to NSAID gastropathy as the "second rheumatic disease" Gastropathy is recognized as one of the most common serious complications of NSAID therapy. Recent studies show that erosive and ulcerative lesions of the upper gastrointestinal tract are noted, according to various sources, in 20-40% of patients who regularly take NSAIDs. A single or long-term use of NSAIDs in 12-30% of cases leads to the development of gastric ulcers and in 2-19% of cases - duodenal ulcers. In general, complications of NSAID-induced gastropathy - bleeding, perforation of ulcers, and their combination, according to American researchers, account for about 70,000 cases per year, and about one in ten with such a phenomenon. With all the undoubted therapeutic benefits, NSAIDs induce changes in the mucous membrane of the gastrointestinal tract (GIT), which, through their manifestations and complications, have a significant impact on people's health. According to Chan FK and Graham DY, 25% of regular NSAID users have gastrointestinal side effects. In the Republic of Uzbekistan, the incidence of ulcer pathology is also high. Temporary disability, disability of the population, and in severe cases, death - all these are negative consequences of peptic ulcer. Currently, practical public health has a significant arsenal of antiulcer drugs belonging to various classes of chemical compounds. However, they do not fully meet the requirements of clinicians. Some drugs have insufficient therapeutic effect. The use of others is associated with a high relapse rate, almost all drugs cause side effects, and sometimes severe complications occur in some patients. In connection with the foregoing, there is an urgent need to search, study and introduce new highly effective and low-toxic antiulcer drugs into the clinic. In this regard, plant substances are of undoubted interest.

**Research Methods:** Method indomethacin ulcers are caused by ulcers in the stomach of rats according to the method of R. U. Khabriev. The test substances (the sum of extracts of St. John's wort, licorice, mediasia, ziziphora and the reference drug - glyceram ) are administered once intragastrically to rats deprived of food 16 hours before the experiment (the animals are placed in cages with a mesh floor without bedding to prevent eating garbage and excrement). After 3 hours, the animals are sacrificed, the stomachs are removed, dissected along the lesser curvature and washed in isotonic sodium chloride solution to remove the contents. Evaluation of the ulcerogenic effect is carried out on a 4-point scale: 0 - no damage, 0.5 - hyperemia, 1 - single minor damage (1 or 2 pinpoint hemorrhages); 2 - multiple injuries (erosion, petechial hemorrhages); 3 - significant and multiple damage to the mucous membrane (erosion, hemorrhage); 4 - gross damage covering the entire surface of the mucous membrane (massive hemorrhages, erosion, perforations). For the experiment, rats are selected, which are divided into 3 groups of 6 each with a body weight of 160-200 g. The first control group of 6 rats was left without food for 16 hours. Three hours before decapitation at the rate of 60 mg/kg of body weight, distilled water and indomethacin were administered. The second control group of rats was also left without food for 16 hours. Three hours before decapitation, indomethacin was administered orally at 60 mg/kg and 50 mg of the total extracts. The third group of test rats were also left for 16 hours of fasting and three hours before decapitation, glycyram was administered when calculating the body weight of animals 75 mg/kg and indomethacin 60 mg/kg. The number of ulcers in the stomach and their area in  $\text{mm}^2$  are determined . The results obtained are statically interpreted. After the termination of immobilization, the animals were slaughtered and their stomachs were subjected to a thorough examination with registration of all detected changes. The results obtained were statistically processed according to Student's criteria.

### **Results and its discussion**

results experiments have shown that in the first control group, the area of ulceration was  $27.2 \pm 1.02 \text{ mm}^2$  . In the second experimental group was  $15.6 \pm 0.6$

mm<sup>2</sup> and in the third comparative group - 19.8±0.8 mm<sup>2</sup>. From this it follows that in the group taking the amount of extracts, the area of ulceration decreased by 42.6%. And in the comparative group it decreased by 27.2%. In the group of patients who took the amount of extracts, the area of ulcers decreased by 1.8 times. And in the group of the studied drug glyceram 1.4 times. These data indicate the presence of a pronounced antiulcer effect of the amount of extracts on the background of experimental indomethacin gastric ulcers. So the sum of the extracts medicinal plants ( St. The favorable effect of the drug is characterized by a significant decrease in the number of rats with ulcers, the number of ulcers per rat, as well as a decrease in the area and degree of ulceration. So, in conclusion, we can say that the sum of the extracts medicinal plants has a distinct anti-ulcer effect, surpassing the well-known drug glyceram in this property.

### **conclusions**

1. In experimental indomethacin gastric ulcer, the amount of extracts medicinal plants (St. John's wort, licorice, mediasia, ziziphora ) has a distinct antiulcer effect.
2. Effect \_ sums of extracts medicinal plants

### **Literature**

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