The LESE complex showed a more pronounced effect on the content of total and neutrophilic PL in comparison with other drugs. The drugs used have a membrane stabilizing, antioxidant effect, and in combination, they enhance the effect of other components, which is a reflection of the restoration of the membrane structure.

Kysylytsia S.O.

CONSERVATIVE METHODS OF TREATMENT OF ACUTE RHINOSINUSITIS

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Rhinosinusitis is inflammation of the mucous membrane of the nose and sinuses. The problem of other inflammatory diseases of the upper respiratory tract, acute rhinosinusitis, in particular, is quite relevant in clinical practice. In recent years, there has been an increase in the incidence of diseases of the nose and paranasal sinuses, which leads to an increase in the number of outpatient visits by family physicians and otorhinolaryngologists.

Objective of the study was to investigate the reasonability and effectiveness of the use of antibacterial agents in patients diagnosed with "moderate acute rhinosinusitis", as well as to confirm or deny the need for treatment based on evidence-based medicine. For the study, patients were selected who were diagnosed on the basis of complaints, medical history, physical examination and laboratory tests with moderate-severe acute rhinosinusitis, and duration of the disease 1 - 3 days. The age of patients was 18 - 40 years.

A total of 30 people took part in the study. To perform the planned study, patients were divided into 3 groups: 1. Patients who received phytopreparation as a part of treatment; 2. Patients who received inhaled glucocorticoid as a part of treatment; 3. Patients who took antibacterial drug as a part of treatment. In the first group of patients, improvement occurred from 4 to 5 days, and recovery from 7 to 8 days from the beginning of treatment. In the second group of patients, improvement occurred from 3 to 4 days, and recovery from 6 to 7 days from the beginning of treatment. In the third group of patients, improvement occurred from 5 to 6 days, and recovery from 8 to 9 days from the beginning of treatment.

Therefore, the results of our work showed the need for antibacterial drugs in acute rhinosinusitis of moderate severity is not appropriate, as indicated in the Order of the Ministry of Health of Ukraine from 11.02.2016 № 85. Uncontrolled use of antibiotics or in the absence of indications antibiotic resistance increases. Treatment should be carried out in accordance with the current orders of the Ministry of Health of Ukraine, as well as based on evidence-based medicine.

Povar M.A.

FEATURES OF THE REACTION OF SYSTEMIC INDICATORS OF PROOXIDATIVE-ANTIOXIDANT HOMEOSTASIS TO CEREBRAL ISCHEMIA-REPERFUSION IN RATS WITH DIABETES MELLITUS

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Objective of the work was to study the indicators of prooxidant-antioxidant homeostasis in the blood plasma in rats with diabetes mellitus complicated by ischemia-reperfusion of the brain.

Diabetes mellitus was simulated by injection of Streptozotocin (Sigma, USA) in the dose of 60 mg per 1 kg of the body weight into the intra-abdominal cavity of albino male rats at the age of two months. Six-month-old animals without diabetes and with its presence underwent bilateral carotid ischemia-reperfusion by clipping the common carotid arteries for 20 minutes. Early effects of ischemia-reperfusion were studied one hour after the start of reperfusion, and delayed - on the 12th day. The content of malonic aldehyde, diene conjugates, products of oxidative modification of proteins of neutral and basic character, activity of superoxide dismutase, catalase, glutathione peroxidase were determined in blood plasma. Numerical data were processed by means of the package of the applied software programs “Statistica” (“Statsoft”, USA).

The content of lipoperoxidation products and the activity of antioxidant enzymes are found

to increase in rats without diabetes after 20-minute carotid ischemia-one-hour reperfusion. In the presence of diabetes mellitus in this period the content of malonic aldehyde and the activity of all antioxidant enzymes in the dominant depression of the last ones decrease. On the 12th day of the postischemic period in rats without diabetes mellitus, the increase in malonic aldehyde content is to some extent compensated by increased superoxide dismutase activity, and in animals with diabetes mellitus the inactivity of lipoperoxidation occurs in the background of depression of all antioxidant enzymes.

In the absence of diabetes in the early period of observation, the content of products of oxidative modification of proteins increases; on the 12th day, these values return to control values. In rats with diabetes mellitus, the increase in the content of products of oxidative modification of neutral proteins in the early post-ischemic period to the 12th day of observation persists, and the content of products of oxidative modification of proteins of the main character in the late post-ischemic period decreases. Regardless of the direction of changes in the content of products of oxidative modification of proteins in cerebral ischemia-reperfusion, in animals with diabetes mellitus in both observation periods their content significantly exceeds the corresponding values in animals without diabetes mellitus, indicating a higher intensity of their oxidation.

Diabetes mellitus changes the response of prooxidative-antioxidant homeostasis to cerebral ischemia-reperfusion in both terms of ischemia-reperfusion.

Semenenko S.B.

PATHOPHYSIOLOGICAL MECHANISMS OF THE EPIPHYSIS EFFECT ON THE ION-REGULATORY FUNCTION OF THE KIDNEY UNDER CONSTANT DARKNESS

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Doctors have been aware of the rhythmic organization of certain body functions for a long time. In healthy people, the rhythms of physiological processes are synchronized with each other and with the rhythms of the environment which provides optimal conditions for the functioning of the body and is a sign of health.

The aim of our research was to study the pathophysiological mechanisms of the pineal gland on the ion-regulating function of the kidneys under conditions of constant darkness. The experiments were performed on 72 sexually mature nonlinear male albino rats weighing 0.15-0.18 kg. The animals were kept in a vivarium at a constant temperature and humidity on a standard diet. The control group consisted of animals (n = 36), which were kept under normal light conditions (12.00C:12.00T) for 7 days. The experimental group consisted of animals (n = 36), which were in constant darkness (12.00T:12.00T) for 7 days. On the 8th day, the animals were subjected to a 5% water load warmed to room temperature with tap water and the parameters of ion-regulating function of the kidneys under conditions of forced diuresis were studied. The studies were performed at 4-hour intervals during the day. Concentration, excretion, absolute and relative reabsorption, proximal and distal transport of sodium ions, concentration index, sodium / potassium ratio and clearance of sodium ions were studied. Diagnosis of functional features was based on the analysis of changes in the characteristics of the mesor (average daily level), amplitude, acrophase and shape of the circadian rhythm curve. The obtained individual chronograms for each animal were grouped on the principle of identity of the maximum acrophase and calculated by the method of "Cosinor analysis" average for each group of chronograms mesor, amplitude and phase structure (time interval between acro- and bathyphase). All stages of the experiment were carried out in compliance with the basic requirements of the European Convention for the Treatment of Animals. The obtained experimental data were processed on personal computers by the EXCE-2003 software package (Microsoft Corp., USA). The values of the arithmetic mean (x), its variance and the error of the mean (Sx) were calculated for all indicators. To identify the probability of differences in the results in the experimental and control groups of animals, the Student's ratio (t) was determined, and then the probability of differences in the samples (p) and the confidence interval of the mean