The use of pilocarpine gel significantly reduced catalase activity and API index. Gel applications with the proposed drugs did not reduce catalase activity. However, they have lowered the API index to some extent. As a result of the first series of experimental studies, we can make a conclusion that an experimental model of periodontitis was developed using one of the pathogenic effectors of bacteria, namely hyaluronidase, which can significantly increase the permeability of bacteria and their toxins in periodontal tissues.

Batih I.V.

DENTAL PROTECTOR AND HEPATOPROTECTOR ACTION OF PHYTOGEL "Dubovyi" ON RATS WITH HEPATO-ORAL SYNDROME

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Hepato-oral syndrome is manifested by dental complications on the background of hepato-biliary pathology. First of all, pathogenesis of the hepato-oral syndrome is based on the violation of the antimicrobial function of the liver, which often occurs as a result of the activation of free radical processes under the action of hepatotoxicants. It is proposed to use antioxidant drugs to prevent the activation of free radical processes and violation of the antimicrobial function of the liver.

The purpose of the study is to determine the possibility of using oral applications of phytogel "Dubovyi" for the prevention and treatment of the hepato-oral syndrome.

Hepato-oral syndrome was reproduced in rats by intra-abdominal administration of the hepatotoxicant hydrazine sulfate. It was used phytogel "Dubovyi", which contains phenolic compounds extracted from oak wood. The condition of the liver was assessed by the level of elastase and malonic dialdehyde (MDA) in the liver and in the serum by the level of bilirubin, alanine aminotransferase, and alkaline phosphatase. The condition of the mucous membrane of the cheeks and gums was assessed by the level of elastase, MDA, urease, lysozyme. The degree of dysbiosis was calculated by the ratio of the relative activities of urease and lysozyme.

Administration of hydrazine sulfate to rats increases the level of inflammatory markers in the liver (elastase and MDA), and the level of liver markers (bilirubin, alanine aminotransferase and alkaline phosphatase) in the serum. In the mucous membrane of the cheek and gum, the activity of elastase, urease, and the degree of dysbiosis increases, but the activity of lysozyme decreases. Rats, which were treated with hydrazine sulfate, on the background of oral applications of phytogel "Dubovyi", in the liver normalizes the level of markers of inflammation in the serum, significantly reduces the activity of alanine aminotransferase and alkaline phosphatase, in the buccal mucosa and gums decreases the activity of elabiase, elastase increases lysozyme activity.

The introduction of hepatotoxicant hydrazine sulfate into the body of rats causes the development of hepatitis and the development of inflammatory-dystrophic processes in the tissues of the oral cavity (hepato-oral syndrome). Oral applications of the phytogel "Dubovyi", which contains phenolic compounds extracted from oak wood, have hepatoprotective, anti-inflammatory, and anti-dysbiotic effects on the tissues of the oral cavity.

Bernik N.V.

COMPLICATIONS OF INFECTIOUS-INFLAMMATORY NATURE IN THE ORAL CAVITY IN THE PRACTICE OF A DENTIST

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The disorders of quantitative and qualitative microscopic flora content, that is, microbe biotic community of the oral cavity and colonization with pathogenic microorganisms, cause inhibition of the body immune reactivity, promote the occurrence of infectious-inflammatory complications, and become one of the important reasons for their development.

The objective of the work is to study the mechanisms of development of infectious-inflammatory complications in the oral cavity after oral surgery in order to improve their treatment and prevention. 81 patients, aged from 20 to 65, were examined. They were prepared for out-patient

surgery in the oral cavity and distributed into three groups according to the types of surgery performed: the 1st group included 27 patients waiting for dental implants, the 2nd group — 28 patients with retention and dystopia of the third lower molar, the 3rd group — 26 patients with radicular cystogranuloma. Before surgery all the patients underwent examination of their immune status in the oral cavity by means of flow cytofluorometry with monoclonal antibodies on the laser cytofluorometer Epics XL-MCL (Coulter, France), microscopic flora of the mucous membrane in the area to insert dental implant and other surgeries in the oral cavity. Isolated cultures of bacteria were identified in order to examine their quantitative and qualitative content.

The results of the investigations demonstrated that alternations of microbial background were found in all three groups of patients prepared for out-patient surgery in the oral cavity. The following stabilizing and periodontal pathogenic flora was found: Prevotella intermedia (2,0+0,19; 5,7+0,21; 3,7+0,20), Fusobacterium spp (2,7+0,20; 5,6+0,19; B 4,6+0,20) respectively. Moreover, Actinomyces spp. (3,7+0,21) were found in patients from the 2nd group with retention and dystopia of the third lower molar.

Examination of microbe biotic community in the oral cavity demonstrates periodontal pathogenic flora available, which determined the necessity to initiate pre-surgical antibiotic preventive therapy of possible infectious-inflammatory complications in case of out-patient dental surgery. Investigation of the immune status in the groups of the study found decreased immune reactivity of the body in 58,1% of patients and normal immune reactivity — in 40,9% of patients.

Examination of the absolute and relative amount of T-lymphocytes, T-helpers, T-suppressors and immune regulating index (IRI) in patients prepared for oral surgery found a statistically reliable difference of parameters in the groups with decreased immune reactivity of the body and normal immune reactivity. The content of CD3 was 57,6+3,5 and 69,4+1,8; CD — 29,2+1,4 and 41,9+1,2; CD8 — 31,9+2,3 and 30,2+2,9; CD4/CD8 — 1,1+0,1 and 1,52+0,respectively. The levels of immunoglobulins A, M, G did not differ.

The results of the study performed are indicative of the fact that patients with decreased immune reactivity of the body prepared for oral surgery in addition to antibiotics in order to prevent infectious-inflammatory complications before surgery should take immunotropic medications as well. Periodontal pathogenic flora and decreased immune reactivity are determining factors promoting the development of infectious-inflammatory complications in the oral cavity in patients prepared for out-patient dental surgery. In addition to antibiotic prevention of infectious-inflammatory complications before surgery in the oral cavity the drugs with immunotropic effect should be prescribed for patients prepared for out-patient dental surgery.

Gerasym L.M.

THE INFLUENCE OF USING A GENERAL ANESTHESIA IN SURGICAL DENTISTRY ON THE PSYCHO-EMOTIONAL STATE OF PATIENTS

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For many people, including children, visiting the dentist is a difficult task. Fortunately, the equipment now is completely different from that which there used to be in public clinics. The importance of the child's first visit to the dentist is clear to doctors as well - in some dental clinics, children receive small gifts and diplomas for courage. Medical staff tries to set up at least some positive relationship with the child, and if it fails - no one makes the little patients open their mouths.

If a medical intervention is necessary or the medical situation is complicated, then there is an extreme measure – the child's dental treatment under general anesthesia. These are, of course, special cases or when there are very serious diagnoses and the above mentioned anesthesia cannot be performed in an ordinary private dental room. Though some countries have great experience in performing such procedures, it is a completely new project for our dentists. But it allows us to solve the problems of children's teeth in one visit with the duration of treatment no longer than 2-3 hours. But who are the candidates for dental treatment under general anesthesia?