female infertility, priapism, negative affects various infections. And this is only part of its therapeutic effects.

Aim. As a result of such a wide spectrum of action of the complex of biologically active substances of the medicinal leech. It has become urgent to preclinically study the immunosuppressive state under the influence of a water-salt extract obtained from a medicinal leech.

Materials and methods. All experimental studies with animals were carried out in accordance with the European Convention for the Protection of Vertebrate Animals used for Experimental and Other Scientific Purposes. All experiments were carried out on 30 male adult nonlinear rats weighing 360–370 g. Endoxan was used to model immunosuppression in experimental groups of animals and was injected intraperitoneally. This drug was used because a common chemical model can induce long-term immunodeficiency in animals without significantly damaging cells and tissues. Was formed 3 research groups of 10 animals each: 1) control - without intervention; 2) endoxan at a dose of 100 mg / kg; 3) endoxan at a dose of 100 mg / kg + water-salt extract of medicinal leech. The extract was injected on the third day with a final concentration of the water-salt extract of 5 μg / g to the animals (once every 3 days). After the end of the administration of the extract, the animals were bled with the addition of 2% heparin (9/1). Then the total number of erythrocytes and leukocytes, the relative number of leukocytes in the blood, the weight and morphology of the thymus were examined. The study of indicators was carried out according to generally accepted methods. The results obtained were amenable to statistical processing.

Results and discussion. As a result of the study, we see that in the second group, the total number of leukocytes and erythrocytes decreases, the weight of the thymus decreases, during morphological assessment, a part of the organ is replaced by adipose and connective tissues, and the number of lymphocytes in it decreases, which indicates the immunosuppressive effect of the drug in comparison with the control group. When analyzing the third group, we found not only a compensatory effect (restoration of all indicators in comparison with the control), but also an immunostimulating effect, where we observed an increase in all indicators compared with the control group.

Conclusions: Our results can be used for the following tests of the effects obtained from the medicinal leech substance. But now, in a preclinical trial, we see such a strong immunomodulatory effect.

PHAGES PSEUDOMONAS AERUGINOSA – AS AN ALTERNATIVE APPROACH TO ANTIMICROBIAL CHEMOTHERAPY

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Introduction. Resistance of microorganisms to antimicrobials is the cause of more than 700 thousand deaths annually. In surgical hospitals of Ukraine there is a clear tendency to increase the resistance of P. aeruginosa strains to all classes of antimicrobial drugs. Resistance of P. aeruginosa strains to antimicrobial drugs in surgical hospitals of Ukraine averages 39.6%. P. aeruginosa tends to develop resistance to almost any antibacterial drug, the mortality of patients with bacteremia is 83.3%.

Aim. To study the antibiotic resistance of P. aeruginosa, to determine the relevance and possibility of using bacteriophages in the treatment of postoperative purulent-inflammatory infections caused by this pathogen.

Materials and methods. Analysis of the scientific literature on the research topic.

Results and discussion. Pseudomonas aeruginosa is one of the species of bacteria that pose the greatest threat to human health. The problem of treatment of patients with postoperative purulent-inflammatory infections is currently relevant because P. aeruginosa is resistant to most antibiotics, namely imipenem, tobramycin, thienam and others. At the present stage, there is a restoration of lost interest in phage therapy and the revival of the use of bacteriophages. The use of bacteriophages is relevant due to its advantages: high specificity (act only on a specific pathogen without affecting the normal microflora), safe in composition (almost do not cause side effects), topical application in the treatment of purulent-inflammatory infections is highly effective, bacteriophages have no problems with drug interaction. But the main advantage is the effectiveness of action against antibiotic-resistant strains of P. aeruginosa.

Conclusions. The use of bacteriophages in the treatment of postoperative purulent-inflammatory diseases is possible and has many advantages over antibiotics, namely in the fight against resistant strains. Використання бактеріофагів є альтернативою антибіотикам та дасть змогу знизити летальність у хворих з бактеріємією.

EVALUATION OF THE TREATMENT AND PREVENTION MEASURES EFFECTIVENESS IN PATIENTS WITH CHRONIC CATARRHAL GINGIVITIS

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Introduction. Oral diseases are still the leading prevalence of human illnesses, and dental care is one of the main types of medical care. Thus, according to the WHO, inflammatory periodontal diseases are the second most common after dental caries and affect almost 90% of adults and about half of the world's population (WHO, 2009. URL: http://www.emro.who.int/.). According to the WHO, the leading role in the development of dental diseases be longs to the microflora of dental plaque, and one of the simplest and most common methods of preventing dental diseases is daily individual hygienic oral care. The main purpose of hygienic oral care is chemical and mechanical removal of plaque which is the main etiological factor of dental caries, periodontal disease, illnesses of the oral mucosa.

Currently, a large number of different tools for hygienic oral care which allows differentiated selection of these products depending on the dental status, age and individual characteristics. A new direction in modern dentistry has been focused on the development of drugs based on analogues of endogenous peptides such as a series of therapeutic and prophylactic agents "VIVAX Dent". "VIVAX Dent" hygiene products contain active synthesized peptide complexes derived from peptides of the thymus, blood vessels, bone and cartilage tissues, which allow to maintain the structural and functional organs and tissues of oral cavity. Improving treatment and prevention of periodontal disease effectiveness today is one of the priorities of modern clinical periodontology.