

AN INFLUENCE OF THE NEW DENTAL GEL «LIZOSTOM» ON A RECOVERING TIME IN RATS WITH EXPERIMENTAL GINGIVITIS

Kavushevskaya N.S., Tiupka T.I.

The National University of Pharmacy, Kharkiv, Ukraine

tyupka_tatyana@mail.ru

Inflammatory periodontal disease remains one of the urgent problems of modern dentistry. Currently, there is an increase in the number of patients with periodontal disease with prevalence in their structure of generalized forms of gingivitis and periodontitis.

The aim of our study was an experimental rationale for the use of new dental gel based on lysozyme in experimental gingivitis .

Material and methods. Experimental work was carried out on 40 white nonlinear rats of different sexes weighing 180-220 g animals were divided into 5 groups: 1 – intact group, 2 – experimental gingivitis, 3 – experimental gingivitis + "Lizostom", 4 – experimental gingivitis + Metrogyl Denta. Experimental gingivitis was modeled preliminary evocation oral dysbiosis by intragastric administration of lincomycin and subsequent local lesion of the gums and tissues of the mouth vestibule applications of the suspension of bee venom .

Results of the study. In experimental gingivitis together with the intensification of proteolysis noted activation of lysosomal enzyme – acid phosphatase (both in serum and in homogenates of periodontal tissue), indicating that the damage and destruction of periodontal membranes of cells. Normalization of acid phosphatase activity in serum and periodontal tissue in untreated control occurred only on day 20 of the experiment. Rats treated with "Lizostom" normalization of this parameter in the blood serum was observed on day 10, using Metrogyl Denta – on day 15. As the acid phosphatase is one of the markers of inflammation, reduction of its activity under the influence of dental gel based on lysozyme indicates its positive effect on the inflammatory process in the periodontium, which is manifested earlier period of convalescence. In addition, "Lizostom" reduces the severity of local and systemic signs of inflammation (redness, swelling, leukocytosis, ESR), which confirms its effectiveness in the treatment of periodontal disease.

Conclusions. "Lizostom" reduces the recovering time in rats with experimental gingivitis by 10 days compared with untreated control and 5 day group compared to animals treated with the gel Metrogyl-Denta.