IMPACT OF THE "SIMBITER" GROUP MULTI PROBIOTICS ON THE CONTENTS OF MONOMERS OF BINDWEB STRUCTURES IN THE PERIODONTAL TISSUES IN CONDITIONS OF PROLONGED HYPOACIDITY

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INTRODUCTION. The purpose of the research was to analyze the impact of the "Simbiter acidophilic concentrated" and "Simbiter-omega" multiprobiotics onto lesions of periodontal tissues of rats in conditions of prolonged use of omeprazole.

MATERIALS AND METHODS. The experiments were carried out on 54 white male rats, weighing 180-250 gr. The animals were divided into IV groups: I- the control group; II - rats were daily injected with omeprazole (14 ml/kg body weight intraabdominally) during 28 days; III - rats were injected with omeprazole (14 ml/kg body weight intraabdominally) in combination with the "Simbiter acidophilic concentrated multiprobiotic (0,14 ml/kg body weight perorally); IV - rats were injected with omeprazole (14 ml/kg body weight intraabdorminally) in combination with the "Simbiter - omega" multiprobiotic (0,14 ml/kg body weight perorally).

RESULTS. The contents of hydroxyproline in the periodontal soft tissues under 28-day injection with omeprazole were increased in 1,87 times ($P<0,05$) in comparison with control. Having analyzed the contents of hydroxyproline in the periodontal soft tissues of rats in conditions of use of the "Simbiter acidophilic concentrated" multiprobiotic against the background of prolonged hypoacidity it is observed a decrease of its contents in 1,12 times, in comparison with animals without correction. While using the "Simbiter-omega" multiprobiotics it is observed a decrease of its contents in 1,49 times ($P<0,05$), in comparison with animals without correction. And the "Simbiter-omega" multiprobiotic in comparison with "Simbiter acidophilic concentrated" one decreased the contents of hydroxyproline in 1,33 timas, i.e., it prevents the increased catabolism of collagenous proteins more effectively. It has been determined that on the 28 day of omeprazole injection the contents of GAG in periodontal soft tissues of rats in conditions of prolonged hypoacidity is increased in 1,37 times ($p<0,05$) in comparison with the control. The use of the "Simbiter-omega" multiprobiotic during 28 days against the background of omeprazole-induced hypoacidity promoted probable decrease of GAG contents in the periodontal soft tissues in comparison with animals without correction. Having analyzed the use of multi probiotics during 28 days against the background of omeprazole injection it may be stated that the "Simbiter-omega" multiprobiotic is more effective, since it decreased GAG contents in 1,18 times ($p<0,05$) greater than the "Simbiter acidophilic concentrated" one. Having researched the contents of free fructose in the periodontal soft tissues in conditions of omeprazole-induced hypoacidity we obtained the following results: under the use of the "Simbiter acidophilic concentrated" multiprobiotic the contents of fructose decreased in 1,7 times ($p<0,05$) in comparison with rats from the control group, and in 2,08 times ($p<0,05$) in comparison with rats without correction.

CONCLUSION. Thus, in conditions of prolonged omeprazole-induced hypoacidity in the periodontal tissues of rats an increased catabolism of collagenous and non-collagenous proteins is occurred, The "Simbiter acidophilic concentrated" and "Simbiter-omega" multiprobiotics prevent depolymerization of collagenous and non-collagenous structures of periodontal connective tissues of rats in conditions of prolonged hypoacidity.