## МІНІСТЕРСТВО ОХОРОНИ ЗДОРОВ'Я УКРАЇНИ БУКОВИНСЬКИЙ ДЕРЖАВНИЙ МЕДИЧНИЙ УНІВЕРСИТЕТ»



## МАТЕРІАЛИ

105-ї підсумкової науково-практичної конференції з міжнародною участю професорсько-викладацького персоналу БУКОВИНСЬКОГО ДЕРЖАВНОГО МЕДИЧНОГО УНІВЕРСИТЕТУ присвяченої 80-річчю БДМУ 05, 07, 12 лютого 2024 року

Конференція внесена до Реєстру заходів безперервного професійного розвитку, які проводитимуться у 2024 році № 3700679

УДК 001:378.12(477.85)

ББК 72:74.58

M 34

Матеріали підсумкової 105-ї науково-практичної конференції з міжнародною участю професорсько-викладацького персоналу Буковинського державного медичного університету, присвяченої 80-річчю БДМУ (м. Чернівці, 05, 07, 12 лютого 2024 р.) – Чернівці: Медуніверситет, 2024. – 477 с. іл.

ББК 72:74.58

У збірнику представлені матеріали 105-ї підсумкової науково-практичної конференції з міжнародною участю професорсько-викладацького персоналу Буковинського державного медичного університету, присвяченої 80-річчю БДМУ (м. Чернівці, 05, 07, 12 лютого 2024 р.) із стилістикою та орфографією у авторській редакції. Публікації присвячені актуальним проблемам фундаментальної, теоретичної та клінічної медицини.

Загальна редакція: професор Геруш І.В., професорка Грицюк М.І., професор Безрук В.В.

Наукові рецензенти: професор Братенко М.К. професор Булик Р.Є. професор Гринчук Ф.В. професор Давиденко І.С. професор Дейнека С.Є. професорка Денисенко О.І. професор Заморський I.I. професорка Колоскова О.К. професор Коновчук В.М. професор Пенішкевич Я.І. професорка Хухліна О.С. професор Слободян О.М. професорка Ткачук С.С. професорка Тодоріко Л.Д. професор Юзько О.М. професорка Годованець О.І.

ISBN 978-617-519-077-7

<sup>©</sup> Буковинський державний медичний університет, 2024

## Vitkovskyi O.O.

## CURRENT STATUS OF THE ANTIOXIDANT SYSTEM PROTECTING ORAL FLUID IN CHILDREN DURING THE TREATMENT DYNAMICS OF ACUTE ODONTOGENIC PERIOSTITIS OF THE JAW WITH DIFFUSE NON-TOXIC GOITER

Department of Paediatric Dentistry Bukovinian State Medical University

**Introduction.** The effectiveness of treatment of acute odontogenic periostitis in children against the background of thyroid pathology was analyzed based on the study of the state of the antioxidant system of oral fluid protection. Inflammatory diseases in the maxillofacial area in children occupy a leading place in the work of an outpatient doctor. However, their diagnosis is imperfect due to many circumstances: objective difficulties in examining children, especially young children, incorrect methodological approach and atypical course of the disease, which is more accurately interpreted today as a pathomorphosis of inflammatory processes. The analyzed statistical materials of various clinics indicate that the diagnosis of odontogenic inflammatory processes in children, who make up from 60 to 80% of patients in hospitals, is incomplete. After all, from 20 to 50% of patients are sent to the hospital with an incorrect diagnosis. About half of them have not had their temporary or permanent teeth extracted, which are sources of infection. Hospitalization is late. All these facts significantly worsen the treatment results and cause the transition of one form of inflammation to another. In addition, inflammatory processes in children often occur against a burdened premorbid background.

The aim of the study was to analyze the effectiveness of the treatment of acute odontogenic periostitis in children against the background of thyroid pathology based on the study of the state of the antioxidant system of oral fluid protection.

Materials and methods. To determine the effectiveness of the developed method of treatment of acute odontogenic periostitis in children suffering from diffuse non-toxic goiter, we treated and investigated the results in 38 children who made up two subgroups of observation: the main (I) subgroup – 20 children with acute odontogenic periostitis against the background of diffuse non-toxic goiter, who used the improved method and the comparison subgroup (II) – 18 children with acute odontogenic periostitis against the background of diffuse non-toxic goiter, who used the generally accepted method. Children of both groups were treated in accordance with the order of the Ministry of Health of Ukraine dated 27.08.04 No 426 "On approval of the Protocols for the provision of medical care to children in the specialty "Pediatric Surgical Dentistry". In addition to the generally accepted measures, children of the main group were prescribed «Imupret» and «Calcemin Advance» to normalize the main protective indicators of oral fluid. To assess the state of the antioxidant system of oral fluid protection, the following indicators were studied: diene conjugates, malonaldehyde, superoxide dismutase, reduced glutathione, glutathione transferase.

**Results.** Insufficiency of the antioxidant system of protection of children's oral fluid with an increase in the level of peroxidation was established, as evidenced by an increase in the level of malonaldehyde by 1.84 times (p<0.05), diene conjugates by 2.0 times (p<0.05) against the background of a decrease in catalase activity by 3.93 times (p<0.05), superoxide dismutase – by 85.42 % (p<0.05). The functioning of the glutathione system is unbalanced and insufficient: a decrease in the activity of glutathione reductase by 49.02 % (p<0.05), glutathione transferase – by 69.27 % (p<0.05), an increase in the level of glutathione peroxidase activity by 73.29 % (p<0.05), which leads to a decrease in the level of reduced glutathione by 4.76 times (p<0.05).

**Conclusions.** Thus, the obtained data indicate an incomplete restoration of the normal functioning of the prooxidant-antioxidant system of the oral cavity with a generally accepted method of treatment and testify in favor of an improved method of complex therapy.