### 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

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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.

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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.

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**Conclusions.** So, we have established an imbalance in the micronutrient supply system for children with caries, which indicates the need for its correction during the development of therapeutic and preventive measures.

#### Kuzniak B.V. PERIODONTOLOGICAL STATUS OF CHILDREN AGED 12 AND 15

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**Introduction.** Caries, periodontal tissue diseases, maxillofacial anomalies and deformations are the most common dental nosologies both in Ukraine and in the world, regardless of age. Periodontal disease is the second most common group of diseases after caries. Every year, there is an increase in the prevalence of periodontal tissue damage in some regions, even up to 80-95% of cases. It is generally accepted to examine the state of periodontal tissues in 15-year-old children, however, numerous literature data indicate a high prevalence of the disease already in 12-year-olds. In this regard, studying the periodontological status in children of different age groups is relevant.

**The aim of** the research is to study the prevalence and clinical features of the course of periodontal tissue diseases in children aged 12 and 15.

**Materials and methods.** To establish the periodontal status of children in Bukovyna, we examined 83 children aged 12 and 15. The following observation groups were selected: I-43 children aged 12 years, II-40 children aged 15 years. The condition of the periodontal tissues was evaluated according to the indexes of PMA (1960) in the modification of Parma and CPI (1997). The hygienic condition of the oral cavity was determined using the Silness-Loe and Stallard indexes. The degree of probability of the obtained results was statistically evaluated.

**The results.** As a result of a dental examination of children of various ages, a high prevalence of periodontal tissue diseases among children of Bukovyna was established. It was revealed that the indices of PMA and CPI were probably worse in 12-year-old children compared to 15-year-old children. In particular, the value of the Schiller-Pysarev test is higher by 10.56% in 12-year-old and by 11.80% in 15-year-old children, sextants with calculus and bleeding are higher in 12-year-olds by 86.27% and 50.57, respectively %, and in 15-year-olds - by 82.05% and 57.54%.

**Conclusions**. Thus, taking into account the high prevalence of periodontal tissue diseases in children of various ages in Bukovina, there is a need for a detailed paraclinical study of the pathogenetic mechanisms of their formation, which will become the basis for improving diagnostic methods and developing adapted treatment and prevention programs.

## Kuzniak N.B. DEFINING THE PROBLEM, STRUCTURE AND RELATIVE NUMBER OF MANDIBULAR FRACTURES AND THEIR COMPLICATIONS

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**Introduction.** The modern stage in the development of surgical dentistry is characterized by a scientific-practical advance both in clinical and methodological areas. It means a new stage that changed theoretical ideas on the issues of traumatism, organization of medical aid to the patients, diagnostic and therapeutic tactics in case of mandibular fractures and their complications.

**The aim of the study.** Increasing the efficiency of providing medical care to victims with complicated mandibular fractures based on imptovement of diagnostic and surgical tactics.

**Materials and methods.** Optimization of treatment of patients with traumatic fractures of the lower jaw by means of a comprehensive approach to diagnostics, treatment and rehabilitation of the victims with fractures of the lower jaw based on a comprehensive study of pathogenic mechanism of development of possible complications with injuries of the lower jaw.

**Results.** A long-term study of clinical-pathogenic aspects of traumatic injuries of the maxillofacial area preceded the formation of an independent clinical issue of a comprehensive treatment of the fractures of the lower jaw.

The issue has become more valuable annually due to continuous increase of maxillofacial traumatism, a bigger amount of maxillofacial injuries, late referral of victims to a medical institution, diagnostic errors and wrong therapeutic tactics at the pre-admission and early hospital periods. According to the data of different authors, fractures of the lower jaw constitute 26-90% among all the injuries of the facial skeleton. Their occurrence today has a steady tendency to increase.

Analysis of the results of treatment of mandible fractures showed that according to the information of different authors the frequency of complications is from 2% to 18,5%. It considerably depends on the method of treatment. Possible complications include inflammations, suppuration of the soft tissues and bone wound, traumatic osteomyelitis reaching 30%.

The structure of fractures of the lower jaw is rather variable and depends on a number of factors. According to the total statistical data, it has various localization with prevailing linear fractures: unilateral - 45,4 %, bilateral - 4,3 % and triple - 0,7% of victims. Comminuted fractures are found in 0,4-1,9% of cases. In case of road accidents bilateral fractures are more often - 16,3-25,7% of cases. Triple fractures of the lower jaw in 90,3% of cases are the results of beating.

The most frequent complication in this category of victims is development of infectious-inflammatory process in the area of fracture. In spite of significant success in the study of etiopathogenesis of these complications, advance of the methods of treatment and prevention, improvement of organization of medical aid given to the victims with fractures of the lower jaw, their occurrence does not decrease. It constitutes 11-22%. In case of combined injuries, the frequency of inflammatory complications is 40%.

**Conclusions.** Maxillofacial injuries as the most severe kind of injury, and fractures of the lower jaw, are characterized by a high level of disability (25-75%) and a long-term inability to work. Therefore, the data presented are indicative of the formation of an important clinical issue on a comprehensive diagnostics and treatment of fractures of the lower jaw. Today this issue remains inadequately solved.

# Kuzyk I.M. ORTHODONTIC STATUS OF CHILDREN OF BUKOVYNA REGION IN THE AGE ASPECT

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**Introduction.** Dentoalveolar anomalies and deformations are an actual problem of today. According to the WHO, their prevalence reaches 92%. Every year, specialists in most countries of the world observe an increase in the prevalence of dentoalveolar anomalies in children and teens and associate this fact with urbanization processes and environmental decay. In Ukraine, this nosology is the third most common dental disease, requiring thorough research in different regions due to the significant difference in epidemiological indicators.

**The aim of the research** is to study the prevalence of maxillofacial anomalies in children of different ages living in Bukovyna region.

**Matherial and methods.** The study of the orthodontic status of children of different ages living in Bukovina was conducted in 3 study groups: I - 306 children aged 6 years, II - 298 children aged 12 years, III - 235 children aged 15 years. The prevalence of anomalies of individual teeth, dentition and malocclusion was assessed, and the presence of orthodontic appliances and the need for orthodontic treatment were taken into account.

**Results.** As a result of the epidemiological examination of school-aged children, the orthodontic status was assessed. It was established that despite the high frequency of orthodontic pathologies, a low number of children are undergoing orthodontic treatment: 0.65% of 6-year-olds, 1.34% of 12-year-olds, and 7.65% of 15-year-olds. It was detected that the proportion of patients with a distal bite is the highest both in the period of early variable bite (36.92%) and in the period of late and permanent bite (39.08% and 40.31%). There is a trend towards an increase in the frequency