

between the mental holes; 5. The average value of the angle of the lower jaw. Statistical analysis of morphological research materials was performed using computer technology with software in the form of a mathematical apparatus of spreadsheets "StatPlus 2005 Professional 3.5.3" (Analyst Soft). For the analysis of the obtained data the generally accepted methods of descriptive statistics and correlation analysis were used.

Identification of patterns of dynamics of morphometric parameters in the period of organogenesis is an important area of morphological research. Based on our obtained digital indicators ( $M \pm m$ ) of the main morphometric parameters of the human mandible in the dynamics of the prenatal period of fetal development, we found out the critical periods of its morphogenesis and derived mathematical functions that describe the normal course of mandibular organogenesis. It can be used to improve the diagnostic algorithms of the norm during prenatal diagnosis and monitoring of the fetus. Critical periods of morphogenesis of the human mandible are the 6th week (the beginning of the formation of the mandible from the ventral processes of the mandibular arch), 9-10th weeks (period of intensive growth of the organ), which may initiate the formation of structural variants in these periods and can be the time of congenital malformations of the maxillofacial area.

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## **INNOVATIVE APPROACHES TO THE PREVENTION OF DENTAL CARIES IN CHILDREN AND PREGNANT WOMEN**

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Early dental caries is an important social and medical problem among all countries of the world, and it is one of the most common diseases among children. The results of previous epidemiological studies in Ukraine showed a high prevalence of caries of deciduous teeth, which reached 62.0% among children aged two years, and up to 70.3% among children aged three years. The antenatal period is important both for general and dental health of the child. Negative impact on the forming of good dental health of the unborn child has not only a multicomponent malnutrition of the mother, characterized by a deficiency of vitamins, macro- and micronutrients, but also a high prevalence of dental diseases of pregnant women. During the physiological course of pregnancy, periodontal tissue disease occurs in 96% of pregnant women, and the prevalence of caries is more than 90%.

Therefore, the aim of our study was to substantiate the scheme of prevention of dental caries in children and pregnant women. To achieve the given objective, we conducted a survey of 60 pregnant women in Bukovina, aged from 20 to 45 years. We formed two groups (main and control groups) each of which consisted of 30 children. In order to prevent caries in pregnant women, both groups carried out generally accepted local prevention measures, rehabilitated the oral cavity, provided recommendations of home hygiene, as well as kept to a balanced diet. In addition, the main group was orally administered vitamin-mineral and iodine-containing drug (1 tablet per day) throughout pregnancy, as well as probiotic chewable pills, which include  $10^8$  viable bacteria *Lactobacillus reuteri* DSM17938 and PTA5289 for a dose of 1 pill for 20 days. Among children born with these parameters, the index of oral hygiene, the prevalence and intensity of dental caries were determined.

As a result of dental rehabilitation and the first course of preventive measures, significant changes in the condition of the hard tissues of the teeth, naturally, did not occur. However, we have noticed certain trends. There was a slight increase in the intensity of caries from 5.0 (the second trimester) to 6.0 (the third trimester) and from 5.0 to 7.0 (after childbearing), which occurred due to the appearance of single initial forms of the disease. Our prevention scheme showed high efficiency, because in the control group of examined children there were more than 15% disorders of enamel mineralization than among children of the main group.

Therefore, the obtained data indicate the high effectiveness of our preventive measures during pregnancy. This helps to stabilize the intensity of dental caries among pregnant women, to

improve dental health and to prevent the development of possible diseases of the dental system of the mother, as well as of her child as a whole.

**Roshchuk O.I.**

**A COMPREHENSIVE TREATMENT OF CHRONIC GENERALIZED PERIODONTITIS  
IN PATIENTS WITH FIXED DENTURES  
AND COMORBID GASTRIC AND DUODENAL ULCERS**

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A comorbid course of chronic generalized periodontitis and gastric and duodenal ulcer disease, especially in the presence of fixed dentures, requires careful selection of a comprehensive treatment with correction of oxidant-antioxidant balance and restoration of metabolic processes of components of extracellular matrix in periodontium.

The aim of the study: to establish the effectiveness of usage of L-glutathione and connective tissue stabilizer (nemoliks C3) in the comprehensive therapy of chronic generalized periodontitis in the presence of fixed dentures at concomitant gastric and duodenal ulcer disease. Material and methods of research: 60 patients with chronic generalized periodontitis and concomitant gastric and duodenal ulcer disease in the cicatrization stage with fixed dentures were examined. Two groups of patients were formed: group 1 (25 people) who received L-glutathione in addition to traditional therapy and group 2 (35 people) who also received nemoliks C3. Clinical examination of the periodontal tissues and laboratory examination of patients were performed. The obtained results were statistically processed.

In the dynamics of treatment, a unidirectional and almost identical in strength decrease of the intensity of lipid peroxidation in patients of the 1st and 2nd groups ( $p>0.05$ ) was found. A more intensive effect of L-glutathione and nemoliks C3 on the natural system of antioxidant protection has been established. In patients of both groups after the course of treatment there was a significant increase in the content of reduced glutathione in erythrocytes (in 1.7 times,  $p<0.05$ ) with normalization of the value ( $p>0.05$ ). Analysis of the results of the study of cytokines in blood in the dynamics of treatment showed their reliable decrease in the 2nd group of patients: TNF- $\alpha$ , IL-1 – respectively in 2.2 and 2.9 times ( $p<0.05$ ) and increase of TGF- $\beta_1$  content – in 2.1 times ( $p<0.05$ ), while in patients of the 1st group changes were not reliable after treatment with the presence of intergroup difference ( $p<0.05$ ). According to the data obtained, the content of protein-bound hydroxyproline in the dynamics of treatment of patients of the 1st group remained unchanged ( $p>0.05$ ), but in patients of the 2nd group it increased in 1.7 times ( $p<0.05$ ) with normalization of the indicator. At the same time, the rate of free hydroxyproline in the blood of patients of the 1st group after treatment decreased by 11.5 %, and in patients of the 2nd group – by 28.6 % ( $p<0.05$ ) with normalization of the indicator ( $p>0.05$ ) and the presence of a difference with the indicator after treatment in the 1st group ( $p<0.05$ ).

Thus, the comprehensive therapy of patients with chronic generalized periodontitis and gastric and duodenal ulcer disease in the cicatrization stage with fixed metal-containing dentures with the inclusion of L-glutathione and nemoliks C3 helps to reduce lipid peroxidation, to reduce the level of proinflammatory cytokines, to restore the metabolic processes of components of extracellular matrix of periodontium.

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**STUDY OF LOCAL IMMUNITY IN PATIENTS WITH CHRONIC GENERALIZED  
CATARRAL GINGIVITIS BEFORE AND AFTER COMPLEX THERAPY**

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Significant prevalence, especially among young people, the number of increasing of cases of long-term course with frequent exacerbations on the background of insufficiently effective treatment, make the problem of generalized catarrhal gingivitis one of the most relevant and