



The results of the investigations demonstrated that alternations of microbial background were found in all the three groups of patients prepared for out-patient surgery in the oral cavity. The following stabilizing and periodontal pathogenic flora was found: *Prevotella intermedia* (2,0+0,19; 5,7+0,21; 3,7+0,20), *Fusobacterium* spp (2,7+0,20; 5,6+0,19; B 4,6+0,20) respectively. Moreover, *Actinomyces* spp. (3,7+0,21) were found in patients from the 2nd group with retention and dystopia of the third lower molar.

Examination of microbe biotic community in the oral cavity demonstrate periodontal pathogenic flora available, which determined the necessity to initiate pre-surgical antibiotic preventive therapy of possible infectious-inflammatory complications in case of out-patient dental surgery. Investigation of the immune status in the groups of the study found decreased immune reactivity of the body in 58,1% of patients and normal immune reactivity - in 40,9% of patients. Examination of the absolute and relative amount of T-lymphocytes, T-helpers, T-suppressors and immune regulating index (IRI) in patients prepared for oral surgery found statistically reliable difference of parameters in the groups with decreased immune reactivity of the body and normal immune reactivity. The content of CD3 was 57,6+3,5 and 69,4+1,8; CD - 29,2+1,4 and 41,9+1,2; CD8 - 31,9+2,3 and 30,2+2,9; CD4/CD8 - 1,1+0,1 and 1,52+0, respectively. The levels of immunoglobulins A, M, G did not differ. The results of the study performed are indicative of the fact that patients with decreased immune reactivity of the body prepared for oral surgery in addition to antibiotics in order to prevent infectious-inflammatory complications before surgery should take immunotropic medications as well.

Periodontal pathogenic flora and decreased immune reactivity are determining factors promoting development of infectious-inflammatory complications in the oral cavity in patients prepared for out-patient dental surgery. In addition to antibiotic prevention of infectious-inflammatory complications before surgery in the oral cavity the drugs with immunotropic effect should be prescribed for patients prepared for out-patient dental surgery.

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## **MORPHOGENES OF THE BONES OF SKULL BASE AT AN EARLY PERIOD OF HUMAN ONTOGENESIS**

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The aim is to find out the chronological sequence of appearance of germs and peculiarities of development of bones of the skull base at an early period of human ontogenesis.

17 series of consecutive histological sections of specimens of embryos and prefetuses aged from 4 till 12 weeks of intrauterine development (IUD) using a complex methods of morphological examination (anthropometry, morphometry, histological sections, three-dimensional computer reconstruction) were studied.

Chondrification of the ectomeningeal capsule begins in the 7th week of IUD (prefetuses 14.0-16.0 mm of parieto-coccygeal length (PCL)) and there are 3 pairs of cartilaginous sources of the bones of the skull base: parachordal cartilage (behind the pituitary gland); pituitary cartilage (on both sides of the pituitary gland); prechordal cartilage (in front of the pituitary gland) are defined. The bones of the skull base are formed as a result of endochondral osteogenesis, while most skull bones are characterized by membranous osteogenesis. At the 8th week of IUD chondrocranium is defined as a holistic structure, continuous with the anlage of the skull, so the morphogenesis of some skull bones is both cartilaginous and membranous. The first of the cartilaginous anlages of the skull base was found parachordal cartilage behind the pituitary gland. Pituitary cartilages are formed around the rudiment of the pituitary gland. Laterally, the centers of chondrification occur in the anlage of orbitosphenoidal cartilages, which are the sources of the development of small alars of the sphenoid bone. The alar-sphenoidal cartilages are the sources of the large alars of the sphenoid bone. The anterolateral process of the orbitosphenoidal cartilage occurs near the orbital part of the anlage of the frontal bone. At the 7th weeks of IUD, the skull base contains separate foci of



chondrogenesis, and at the end of the 8th week of IUD they merge into a single perforated main cartilaginous plate with primitive vascular-nerve openings.

In the development of the base and calvaria of the human skull 3 consecutive stages can be distinguished: 1) the emergence of the mesenchymal source (ectomeningeal capsule); 2) the formation of cartilaginous anlagen through the development and fusion of numerous individual foci of chondrogenesis in the mesenchyme; 3) ossification of the cartilaginous anlagen of more than 100 foci of osteogenesis. The processes of chondrification of the anlagen of the skull base are observed at the beginning of the prefetal period of ontogenesis (the 7th week of the IUD), and at the end of the 8th week of the IUD as a whole the cartilaginous base of the human skull is formed.

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## **PHOTODYNAMIC THERAPY IN COMPLEX TREATMENT OF GENERALIZED PERIODONTITIS**

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Among the large number of dental diseases are those that occur in most people, in particular, such are periodontal diseases, which in Ukraine affect from 80 to 90% of the population.

Traditionally, patients with periodontal disease and, in particular, periodontitis are professional oral hygiene, local use of antiseptics and anti-inflammatory drugs, as well as in the acute course and the presence of purulent discharge from periodontal pockets - systemic antibiotic therapy, which can also cause adverse allergic reactions. Imbalance of the obligate microflora of the oral cavity.

The aim of the study was to determine the effectiveness of photodynamic therapy in comparison with the use of systemic antibiotic therapy in the treatment of generalized periodontitis in the acute stage with the presence of purulent discharge. To achieve this goal, 43 patients aged 30 to 55 years were selected who were diagnosed with generalized periodontitis with purulent discharge from periodontal pockets of I and II centuries. severity. Among the subjects were 24 (55.8%) women and 19 (44.1%) men. In the clinical study of periodontal tissues and for an objective assessment of the results used Para clinical tests: Hygiene Index - Green-Vermillion (1964); index of bleeding gums Mehlman (1971) in the modification of Cowell (1975); Russel periodontal index (1956); benzamine test (Parma). X-ray examination.

At the next stage of treatment, patients were divided into two groups - the main and the comparison group. Main - 21 patients who received photodynamic therapy with the Helbo system in complex treatment. Comparison - 23 patients in the complex treatment of which antibacterial therapy was carried out by "Augmentin" (500 mg / 125 mg, course 7 days). The analysis of the results of the study showed that for 2-3 days in patients of the main group who received photodynamic therapy, there was a regression of the main symptoms of inflammation in the vast majority of people (86.0%). In the comparison group, similar positive dynamics was observed for 3-4 days in (84.5%).

By the end of the first week from the beginning of complex treatment, complete regression of subjective and objective signs of inflammatory process in periodontal tissues was achieved in 92.5% of patients in the main group, and in the comparison group - in 90.5% of cases.

The generalized analysis of the obtained clinical and radiological results of the study showed that the use of photodynamic therapy in the complex treatment of chronic generalized periodontitis is accompanied by a more pronounced positive dynamics of treatment, bactericidal effect is local, complications associated with allergic reactions are minimized.