

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



## **МАТЕРІАЛИ**

**104-ї підсумкової науково-практичної конференції  
з міжнародною участю  
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БУКОВИНСЬКОГО ДЕРЖАВНОГО МЕДИЧНОГО УНІВЕРСИТЕТУ  
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patients with radicular cystogranuloma. Before surgery all the patients underwent examination of their immune status in the oral cavity by means of flow cytometry with monoclonal antibodies on the laser cytometer Epics XL-MCL (Coulter, France), microscopic flora of the mucous membrane in the area to insert dental implant and other surgeries in the oral cavity. Isolated cultures of bacteria were identified in order to examine their quantitative and qualitative content.

**Results.** The results of the investigations demonstrated that alternations of microbial background were found in all 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 2<sup>nd</sup> group with retention and dystopia of the third lower molar. Examination of microbe biotic community in the oral cavity demonstrates 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 has revealed 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 a 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.

**Conclusions.** The results of the performed study are indicative of the fact that patients with decreased immune reactivity of the body should also take immunotropic medications in addition to antibiotics in order to prevent infectious-inflammatory complications before their oral surgery. Periodontal pathogenic flora and decreased immune reactivity are determining factors promoting the 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 the drugs with immunotropic effect should be prescribed for patients before a surgery in the oral cavity.

**Gagen O.Yu.**

## **THE METHOD OF TREATMENT OF MANDIBLE FRACTURES WITH PURULENT-INFLAMMATORY COMPLICATIONS**

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**Introduction.** Occurrence of inflammatory complications in the victims with mandible fractures is 35-40%. Post-traumatic inflammatory complications in patients with mandible fractures are mostly associated with not extracted tooth (located in the line of fracture), poor fixation of the mandible fragments, reduced body reactivity and other factors. Even the lack of the tooth in the line of a damaged mandibular bone is not an absolute guarantee to prevent the development of post-traumatic complications in patients with mandible fracture, since these complications can occur due to lacerations and hematomas in the adjacent soft tissues.

**The aim of study.** To improve the effect of treatment of patients with mandible fractures complicated by purulent-inflammatory processes by means of introducing dilators made of nickel-titanium with memory effect into the postoperative wound.

**Material and methods.** Patients with mandible fractures who had purulent-inflammatory complications underwent repositioning and immobilization of bone fragments with dental splints with hooking loops according to S.S. Tigerstedt and CITO with intermaxillary rubber pulls. After reposition and immobilization, the purulent-inflammatory process was opened and drained.

**Results.** Osteoreparation processes in the place of mandible fracture were assessed on X-ray, and healing of purulent-inflammatory events was estimated by means of the common clinical examinations. The two groups of patients were formed – the main and control ones. In the main

group (30 individuals), after abscess was opened, a dilatator made of nickelide-titanium TH-10 was used as a drain. The dilatator is like a crown in shape consisting of 4-8 wire return loops. The device made of nickelide-titanium TH-10 allows easily reduce the dilatator diameter more than 20 times in a cooled state (0-5<sup>0</sup>C). It simplifies introducing the device into the postoperative wound and reduces its traumatic installation. Under the effect of temperature in the adjacent tissues, the device gradually becomes of its initial shape, self-fixed in the wound, and dilates it. Traditional perforated double polyvinyl chloride tubular drains were used in the control group including 32 individuals. The treatment of patients from the both groups included antibacterial, anti-inflammatory, detoxification, pain-relieving and desensitizing therapy. To estimate the clinical effect of the nickelide-titanium dilatators used the following parameters were considered: decreased swelling of the soft tissues (24 hours), stopping discharge from the wound (24 hours), infiltrate resorption (24 hours), the first signs of granulation and epithelization of the wound (24 hours), formation of the primary bone callus (24 hours), and stopping intermaxillary immobilization (24 hours). Appearance of the first signs of formation of the primary bone callus was assessed on X-ray.

**Conclusions.** The results of the clinical examinations obtained are indicative of a reliable effect of dilatator use made of nickelide-titanium in a comprehensive treatment of purulent-inflammatory processes occurring due to complications of mandible fractures. Treatment of patients by means of this method enables to prevent development of post-traumatic osteomyelitis and normalize the process of the osseous tissue regeneration.

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## **PSYCHO-EMOTIONAL ASPECTS OF GENERAL ANESTHESIA IN SURGICAL DENTISTRY**

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**Introduction.** For many people, including children, visiting the dentist is a difficult task. Fortunately, the equipment now is completely different from that which there used to be, even in public clinics. The importance of the child's first visit to the dentist is clear to doctors as well - in some dental clinics children receive small gifts and diplomas for courage. Medical staff try to set up at least some positive relationship with the child, and if it fails - no one makes the little patients open their mouth.

**The aim of study.** To study the effectiveness of general anesthesia in surgical dentistry.

**Material and methods.** If a medical intervention is necessary or the medical situation is complicated, then there is an extreme measure – the child's dental treatment under general anesthesia. These are, of course, special cases or when there are very serious diagnoses and the above mentioned anesthesia cannot be performed in an ordinary private dental room. Though some countries have a great experience in performing such procedures, it is a completely new project for our dentists. But it allows us to solve the problems of children's teeth in one visit with the duration of treatment no longer than 2-3 hours. But who are the candidates for dental treatment under general anesthesia?

**Results.** First of all they are the children with special needs. Children who suffer from specific diseases (different types of syndromes, neurological disorders, autism, etc.) require special dental care, which, in most cases, can not be provided without general anesthesia, classic intervention in the dental room can damage the health of the child or may be impossible without the cooperation with the patient. The patients are very small kids who need large amount of dental treatment. The onset of dental diseases can occur in early childhood the child then requires complex intervention, rehabilitation of a large number of teeth from the age of 2-3 years. At this age, children tend to have very low degree of contact or cooperation with the doctor, and therefore there is a high risk of being injured during the classical dental surgery. In this situation, after a full dental assessment (clinical and radiological) of the patient, the practitioner may recommend dental treatment under general anesthesia, surgery, which includes resolution of all dental problems of the child in one visit (treatment), the length of which does not exceed 3 hours. At the end of dental