



representatives of the genus *Proteus*. The presence of *Candida albicans* can be regarded as a marker of failure of local immunity of the oral cavity. Pathogenic microflora in the periodontal pockets was represented by pyogenic cocci *Str. pyogenes* and *St. aureus*. There was an increase in sowing *St. aureus* depending on the condition of palatine tonsils. The incidence rate of *St. aureus* increased from 11,5% in patients without tonsils pathology up to 22.0% in patients with periodontitis and compensated form of chronic tonsillitis.

Thus, chronic periodontitis is accompanied by significant quantitative and qualitative changes in the periodontal microbiocenosis, namely, a decrease in the content of normal microflora, an increase in the number of pathogenic staphylococci and streptococci, activation of microorganisms, which are uncharacteristic for the oral cavity (*Enterobacteriaceae*, *Candida*).

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INFLUENCE OF ORAL APPLICATIONS OF SMALL DOSES OF ADRENALINE ON THE BIOCHEMICAL INDICATORS OF PERIODONTAL TISSUES OF RATS

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Diseases of periodontal tissues are one of the most urgent problems of modern dentistry.

The aim was to investigate the condition of periodontal tissues of rats in hyperactivity of the sympathetic nervous system.

We used adrenaline to reproduce the sympathetic nervous system hyperactivity. The experiments were performed on old rats (13 months), daily, oral gel applications with an adrenaline content of 0.18 mg / ml at a dose of 0.2 mg / kg live weight were performed for 10 days. After animal euthanasia in the gum homogenates, the level of inflammatory markers was determined: the activity of the proteolytic enzyme elastase by hydrolysis of the synthetic substrate and the content of malondialdehyde (MDA) by the thiobarbitur method. Also, measurements of the activity of the bacterial enzyme urease by hydrolysis of urea (indicator of bacterial insemination), the activity of the antimicrobial enzyme lysozyme by lysis of bacterial cells of *M. lyzodeikticus*, the activity of the antioxidant enzyme catalase, and the ratio of the activity of catalase were conducted.

A significant ($p < 0.05$) effect of adrenaline showed only one indicator, namely urease activity, which increased by 30%. All other indicators did not change significantly, which may indicate a small dose of adrenaline (only 0.2 mg / kg daily for 10 days).

Thus, under the influence of small doses of adrenaline in bone tissues of periodontium, phosphatase activity and mineralization index increased significantly, other indicators remained practically unchanged.

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TREATMENT OF CONCOMITANT PATHOLOGY OF THE ORAL CAVITY IN PATIENTS WITH MAXILLOFACIAL INJURY

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Purpose: improve the efficiency of prevention and treatment of concomitant diseases of the oral cavity in patients with maxillofacial trauma by application of adaptogenic and mineralizing drugs in comprehensive therapeutic measures.

Objectives: 1. To determine the condition of the teeth, periodontal tissues, homeostasis of the oral cavity in the early period after trauma in patients with mandible fractures. 2. To assess the influence of adaptogens on the hygiene level of the oral cavity and periodontal tissues in patients with maxillofacial trauma. 3. To assess the influence of adaptogens on biochemical and immunological parameters of saliva and blood serum of patients with maxillofacial trauma. 4. To develop, substantiate and evaluate the effectiveness of a new method of prevention and treatment of concomitant pathology of the oral cavity in patients with maxillofacial trauma. Methods: clinical -



examination of patients using the index of assessment of oral hygiene level related to periodontal tissues, dental tissues; radiological; laboratory: biochemical - to characterize metabolic disorders in the tissues of the oral cavity and evaluate the effectiveness of therapy, immunological - to assess the status of local and systemic immune system and nonspecific resistance in patients.

In patients with maxillofacial trauma a multi-sided functional study of oral health in the early period after trauma changes in the nature of clinical, biochemical and immunological parameters was conducted, resulting in deterioration of oral hygiene level, poor condition of periodontal tissues, increasing of peroxide lipid depletion against AOC background, significant changes in the protease-inhibitor system – increasing of proteolytic activity, elastase in particular, with the reduction of trypsin inhibitor, failure of local antimicrobial protection and problems in the humoral immune system, which requires obligatory correction to prevent the development of complications.

The results of biochemical and immunological studies of saliva and blood serum of patients with maxillofacial injury shows the presence of deep systemic metabolic disorders and immune system within them, and changes of those characteristics can predict the risk and nature of inflammatory and dystrophic diseases in the periodontal tissues.

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THE BENEFITS OF USING GENERAL ANESTHESIA FOR CHILDREN IN SURGICAL DENTISTRY

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For many children visiting a dentist and treating their teeth is quite a challenge. 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.

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?

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 treatment under general anesthesia the patient is fully rehabilitated, but in terms of dental results - they are absolutely wonderful. This procedure includes a number of classic treatments performed in the dental room, and the child's stress is minimized.