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.

The benefits of dental treatment under general anesthesia can only be discussed in the context in which it is carried out under conditions of maximum safety for children patients. We should keep in mind that the intervention must be carried out in the hospital, equipped with all the necessary equipment in operating rooms, which is able to manage this kind of treatment in all phases of anesthesia.

Therefore, the dental treatment of children under general anesthesia in the dental room / dental clinic is completely inappropriate, this kind of intervention can only be performed safely in all respects in a hospital. It is where the dental treatment under general anesthesia is conducted and supervised by a team of anesthesiologists who specialize in treating children, and, if necessary, there are pediatrician of related sciences, who, together with dentists, provide the prerequisites and conditions for dental treatment in order to obtain good results which are unattainable with traditional methods of treatment.

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PATHOGENETIC ASPECTS OF THE FORMATION OF CHRONIC CATARRHAL GINGIVITIS IN CHILDREN UNDER CHRONIC NITRATE LOADING

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The multicentric character of diseases of the periodontium calls for a necessity of studying the mechanisms of the formation of inflammation in the children's periodontal complex, taking into account the effect of certain endo- and exogenous factors and that will enable to approach differentially to an elaboration of diagnostic and medico-prophylactic programs.

In order to establish the mechanisms of a lesion of the periodontal tissues in children, living on a nitrate contaminated territory, a multicentric correlation analysis of the principal symptoms of gingivitis was carried out – an inflammation, gingival hemorrhage, dental tartar, the state of the oral hygiene and the indices of the prooxidant-antioxidant system in 30 children aged 12, 10 of them having a slight degree of severity of chronic catarrhal gingivitis (CCG), 10 children – a medium degree of severity and 10 children belonged to a group of arbitrarily healthy subjects.

As a result of a multicentric correlation analysis, three basic factors were revealed, their determination made it possible to identify the effect of each of the indices on the development of pathology.

Thus, factors I (r=0.758) reflects the nature of the state of the prooxidant-antioxidant system of the children's oral fluid, the latter being indicated by a high level of correlation dependences with almost all paraclinical parameters. It includes an elevation of the level of a nitrite-ion (r=0.89), diene conjugates (r=0.82), the level of the total protein (r=0.82), with a decrease of the activity of catalase (r=0.88), superoxide dismutase (r=-0.79), glutathione reductase (r=-0.85), glutathione transferase (r=-0.84) and a reduction of the level of HS-groups (r=-0.87) and the level of reduced glutathione (r=-0.95). This factor incorporated the degree of the marked character of such symptoms of CCG as an inflammation (r=0.74) and gingival hemorrhage (r=0.74), which corroborates a significant role of the above-mentioned biochemical indices in the formation of these particular signs of gingivitis. Factors II (r=0.502) – characterizes the influence of generally accepted factors in the development of gingivitis: the condition of the oral hygiene (r=0.72), dental tartar (r=0.88), the result of their actions being an inflammation (r=0.55) and gingival hemorrhage (r=0.51) in case of an increased level of malonic dialdehyde (r=0.71) as an end product of lipid peroxidation that is also indicative of an activation of the prooxidant mechanisms of alteration in the pathogenesis of the diseases. Factor III (r=0.2) – included the activity of glutathione peroxidase (r=0.93) which had a tendency towards an elevation with due regard for activation of the stress-limiting action of the glutathione system. The low level of the factor as to the general contribution to the mechanisms of the development of gingivitis is maybe explained, to a certain extent, by nonspecificity of the said system.