

FEATURES OF DEVELOPMENT, COURSE AND TREATMENT OF JAW PERIOSTITIS IN CHILDREN .

AKHMEDOV ILKHOM IBROHIMOVYCH

Assistant at the Department of Pediatric Dentistry, Bukhara State Institute.

ABSTRACT It is known that the diagnosis and treatment of inflammatory diseases of the maxillofacial region represent one of the main problems in pediatric dentistry. According to a number of researchers, inflammatory diseases of the maxillofacial region account for up to 21% of all surgical and 52% of dental diseases in childhood. The course of odontogenic infection in children has a number of features due to the relative immaturity of the child's organs and tissues, imperfect immunity, abundance of lymphatic tissue, the presence of anatomical and physiological features of the structure of teeth and jaws, ease of damage and increased permeability of natural protective barriers to microbes, etc.

Key words: inflammatory diseases, childhood, structural features of teeth, microbes, complications, pus.

In most children, the source of inflammatory odontogenic diseases is a complication of caries of primary teeth. Depending on the nature of the pathogen and the reaction of the child's body, the routes of infection, inflammatory diseases in the maxillofacial area can be both acute and chronic . According to the literature, acute purulent periostitis develops quickly in young children. The transition from the stage of acute inflammation of the pulp or periodontitis can occur within a few hours and occur with severe inflammatory phenomena. There are practically no works reflecting the frequency and characteristics of the course of acute purulent periostitis depending on age and the "causal" tooth. There are a few studies devoted to the study of nonspecific factors of protection of the oral cavity, wound microflora and oral fluid in children with acute purulent periostitis. In recent years, a number of studies have been published indicating the effectiveness of the use of bacterial lysates in inflammatory processes in the oral cavity . However, we have not found specific recommendations for their use in the complex treatment of periostitis. Treatment and prevention of inflammatory diseases of the maxillofacial area are one of the main problems in pediatric dentistry. According to a number of researchers, inflammatory diseases of the maxillofacial region account for up to 21% of all surgical and 52% of dental diseases in childhood . The course of odontogenic infection in children has a number of features due to the relative immaturity of the child's organs and tissues, imperfect immunity, abundance of lymphatic tissue, the presence of anatomical and physiological features of the structure of teeth and jaws, ease of damage and increased permeability to

microbes, natural protective barriers, etc. For development For periostitis, exposure to microorganisms alone is not enough. Most often, the process develops during a period of decreased protective reaction of the body as a whole and locally . The occurrence of the process is facilitated by hypothermia or overheating of the body, weakening of the child's body due to infectious diseases, etc. Among inflammatory diseases of the maxillofacial area in children, periostitis is more common than abscesses, phlegmons and osteomyelitis. Unfortunately, both their number and the frequency of complicated forms of these diseases continue to grow. Periostitis of the jaws in children occurs in 15 to 35% of diseases . Cooling, overwork, and malnutrition are factors predisposing to the development of acute purulent periostitis; in addition, the causes of infection can be: trauma to the teeth, jaws and purulent processes in the soft tissues adjacent to the jaws . The disease develops most often from destroyed temporary molars of the lower and upper jaw, permanent molars of the lower jaw, and less often from other foci of odontogenic infection. The process is most often localized on the upper jaw. Symptoms of intoxication in the form of pale skin and mucous membranes, lethargy, and malaise are not expressed in all cases. The onset of the disease is characterized by pain, localized in half of the cases in the affected tooth. Often the first symptom is swelling of the perimaxillary soft tissues and an increase in body temperature to 38-38.5°C. The appearance of an inflammatory infiltrate in the soft tissues of the perimaxillary region is accompanied by a temporary cessation or subsidence of pain in the area of the “causal” tooth. Soon the pain reappears, but its character changes: it becomes aching and spreads to the entire jaw. The transitional fold is smoothed, hyperemic, and sharply painful on palpation; sometimes a fluctuation is detected. Depending on the location of periostitis, swelling of various anatomical areas appears on the face. If periostitis is located in the area of the lower molars, then mouth opening may be limited as a result of a reflex toxic effect on the masticatory muscles. The appearance of skin hyperemia indicates the involvement of the cellular spaces of the face or neck in the inflammatory process. Soft tissue swelling appears, which is localized in one area or in two adjacent areas. The skin over the affected area is often hyperemic and tense. However, not in all cases, tension of the skin in the area of infiltration is accompanied by skin hyperemia. Radiologically, in the acute stage of periostitis, damage to bone tissue and periostitis is not determined. Differential diagnosis is helped by signs of inflammation of the periosteum - hyperemia, swelling of the mucous membrane, smoothness of the transitional fold, pain on palpation, as well as swelling of soft tissues occupying one or two adjacent areas and the presence of a “causal tooth” in the oral cavity, which is characteristic of acute odontogenic periostitis jaws. Clinical manifestations of odontogenic periostitis are the result of a changed reaction of the body, a decrease in its resistance to this infection. Therefore, inflammatory signs increase and are accompanied by symptoms of general intoxication, expressed differently in different

patients. With periostitis, one can observe not only inflammatory phenomena in the gum area of the diseased tooth, but also collateral swelling of the soft tissues, spreading beyond the lesion and mostly localized typically, depending on the location of the diseased tooth. Studies by individual authors have shown that the spread of infection from periodontal tissue to the periosteum of the jaw is possible not only per continuitatem, that is, through the system of bone marrow spaces, but also through the lymphatic and venous systems. The authors described the intimate relationship (according to these systems) of the periodontium with the periosteum of the jaw and the mucous membrane of the gums. Even if the infection spreads along the surface of these vessels and penetrates the walls of the alveoli through pinholes “drilled” by these same vessels, then these pinholes thin the walls of the alveoli, create porosity, and the latter contributes to the spread of infection. Therefore, with periostitis, the vestibular periosteum and the adjacent bone wall, which is thinner and more porous, are most often affected. Purulent exudate, spreading along the line of least resistance, penetrates mostly to the vestibular bone plate of the alveoli and, due to its enzymatic properties, partially melts the wall; the periosteum and the adjacent mucous membrane become inflamed; Gradually, the exudate peels off the periosteum, accumulating under it. This is how a periosteal abscess is formed; if the periosteum also melts, which happens later, then a subperiosteal abscess is formed. According to a number of authors, odontogenic periostitis in the lower jaw of children occurs twice as often as in the upper jaw and accounts for 34.1% in relation to periostitis in adults. At the same time, the age of the child largely determines the nature of the disease. An analysis of available literary sources indicates that dentists often make mistakes both in the diagnosis and in the treatment of acute periostitis of the jaws in children. This, in turn, leads to the development of severe complications and a significant increase in treatment time in a hospital setting. Errors in determining the stage of the inflammatory process lead to unreasonable prescription of thermal procedures, replacement of active surgical intervention with antibacterial therapy, and late hospitalization.

Bibliography :

1. Kamalova F.R. Changes in microflora and nonspecific protective factors in children with inflammatory diseases of the maxillofacial region. “Current issues in pediatric dentistry” //Second All-Russian Scientific and Practical Conference dedicated to the 90th anniversary of the birth of Professor Saifullina Halims Mukhlisovna. Collection of scientific articles. – 2019. – pp. 70-74.
2. Kamalova F.R. Study of important aspects in the development of purulent-inflammatory processes in the maxillofacial region in children // Problems of biology and medicine. - 2017. - No. 4.1 (98). – P. 69.
3. Kamalova F.R. Study of dental status in children with diabetes mellitus in the Bukhara region // New day in medicine. 2020. - No. 1(29). - pp. 216-218.

4. Kamalova F.R. Therapeutic and preventive measures for dental diseases in children with diabetes mellitus // New day in medicine. – 2019. - No. 2 (30/2). - pp. 223-226.
5. Kamalova F.R. Primary prevention of dental diseases in children //New day in medicine. - 2020. - No. 2 (30/2). - P. 383.
6. Kamalova F.R. Indicators of the prevalence and intensity of dental caries in children of the Bukhara region // New day in medicine. - 2019. - No. 2(26). – pp. 183-185.
7. Kamalova F.R., Afakova M.Sh. Replantation of teeth in acute purulent periostitis // New day in medicine. - 2019. - No. 3(27). - pp. 124-125.
8. Kamalova F.R., Inoyatov A.Sh. The influence of the drug IRS-19 on the microflora of the oral cavity in patients with acute periostitis // Problems of biology and medicine. - 2007. - No. 2 - P. 81-82.
9. Kamalova F.R., Musaev Sh.Sh., Akhmedov A.B., Eronov E.K. Prevention of endodontic errors and complications in dental treatment in children // New day in medicine. - 2018. - No. 3(23). – pp. 176-179.
10. Navruzova Ugilkhon Orzihan Kizi , Saidov Dzhumamurad Zaineovich and Narzullaeva Mehriniso Zainiddinovna . (2023). Histological data in endoscopically detected gastritis. American Journal of Pediatric Medicine and Health Sciences (2993–2149), 1(9), 306–309. Retrieved from <https://grnjournal.us/index.php/AJPMHS/article/view/1596>.
11. Navruzova NO Ikhtiyarova GA, Karimova GK, Navruzova UO, Shukurov IB, Amanova H. Ya. - Modern diagnostic methods for the early detection of diseases of the uterine cervix // Medical Bulletin -2019. #4 P.77-82
12. Navruzova UO, Karimova GK, Ikhtiyarova GA - Modern diagnosis of brain pathology // Medicine and sport -2020 No. 1. pp. 74-773.
13. Navruzova UO, Negmatullaeva MA - [Study of caries in children with type 1 diabetes, increasing the effectiveness of treatment and prevention.](#) // Internet scientific journal of sustainable development and advanced research-2022 No. 1.S. 395-399.
14. Ibrokhimovich AI and Kesey JMM (2023). For type 1 diabetes Patient Caries in children Research, Treatment and prevention effectiveness Increase. SCIENTIFIC JOURNAL OF APPLIED AND MEDICAL SCIENCES , 2 (4), 165–171. Retrieved from <https://sciencebox.uz/index.php/amalibbiyot/article/view/6735>.
15. Ibrokhimovich AI, Kizi JMM (2023). Improving the effectiveness of research, treatment and prevention of caries in children with type 1 diabetes. Scholastica : Magazine Science and Health Education, 2(4), 182–187.