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PREVENTION OF COMPLICATIONS ACUTE ODONTOGENIC OSTEITIS OF THE JAWS

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Abstract:

Chronic apical periodontitis (destructive osteitis) is a focus of chronic intoxication and sensitization of the body, representing a potential threat to the development of acute, chronic osteomyelitis of the jaws. Treatment of chronic destructive osteitis is one of the important problems that a dentist faces in his practice (1). Conservative treatment is aimed at eliminating the microbial flora, stimulating bone regenerative processes in the periapical region, and complete obturation to prevent reinfection of the root canal system and periodontal tissues. It is also the least traumatic method for the patient [1].

Keywords: Periapical region, odontogenic osteitis, Conservative treatment

Despite certain advances in dentistry, the problem of purulent infection remains relevant. This is due to the steady increase in the frequency of odontogenic inflammatory diseases, the increase in severe forms with frequent complications, requiring large-scale surgical interventions and intensive care (A.G. Shargorodsky, 2001; T.K. Supiev, 2001; V.V. Voginsky, S. .V.Dyakova, 2004). Acute purulent odontogenic osteitis of the jaws is an urgent problem in dentistry and maxillofacial surgery. In recent years, both in outpatient dental institutions and in maxillofacial hospitals, an increase in patients with this pathology up to 40% has been noted (Sivozhelezova A.L., 2000; Shargorodsky A.G., 2002). The severity of acute purulent odontogenic osteitis of the jaws increased. The latter often leads to the occurrence of inflammatory complications, such as abscesses and phlegmon of the face and neck, odontogenic osteomyelitis, odontogenic maxillary sinusitis, mediastinitis, sepsis, etc. (Vakhromeeva E.H., 2008; Shalaev O.Yu., 2008; Shukhorova Yu.A. , 2008; Zubareva A.A., 2009; Ariji Y., 2002; Jacobson H.L., 2002).

Periodontal diseases occupy one of the most important places among the problems in modern dentistry. The significant prevalence of patients with chronic apical periodontitis, the adverse effect of periodontal infection foci on the body, leading to tooth loss, determine the relevance of the problem of complex diagnosis and treatment of this pathology. Today, it is alarming that the number of aggressive forms of the disease that occur with frequent exacerbations and are resistant to traditional methods of treatment is increasing [1,49,51,55,72,90].

Among patients who applied for emergency dental care, patients with acute or exacerbated chronic periodontitis account for 75%. In addition to the pain syndrome characteristic of this disease, the presence of a focus of odontogenic infection poses a danger to the tissues, organs of the oral cavity and the body as a whole due to the replenishment of the microbial landscape of the oral fluid with pathogens, bacteriotoxins. The consequence of this dental pathology is premature loss of teeth and, in connection with this, a violation of the functions of chewing and speech, the aesthetics of the dentition in people of any age, the formation of other dental and somatic pathologies. This indicates the relevance of the problem of effective endodontic treatment of periodontitis [2,10,34,54,62,81,131].

Improving the quality of treatment of patients with periodontitis is still an urgent task. The main cause of unfavorable outcomes in the treatment of teeth with chronic apical periodontitis is inadequate sanitation of the root canal system. The problem of treating chronic periodontitis is one of the important and not fully resolved problems of therapeutic dentistry. This is due to the significant prevalence of this disease, the complexity and laboriousness of medical manipulations, a large percentage of failures and complications in treatment [16,17,28,99,120,128].

There is no doubt that the treatment of chronic apical periodontitis cannot currently be called a solved problem. The frequency of exacerbations in the immediate and long-term after traditional endodontic treatment remains high. The effectiveness of conservative treatment of periodontitis is on average 85%, and this figure varies depending on the clinical form of the disease, the means and methods of treatment, the resistance of the patient's body and many other factors. Difficulties in the treatment of periodontitis are due to the duration of the processes of regeneration of the focus of destruction of the periapical region, occurring mainly from six months or more after the completion of endodontic treatment. Another problem that hinders or even excludes the possibility of

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direct endodontic therapeutic effects on the periodontium is the peculiarity of the anatomical structure of the root canals of the teeth [2,83,144,178,213].

The wide prevalence of periodontal disease, the complexity and laboriousness of its treatment is combined with a high percentage of unsatisfactory results in the treatment of chronic apical periodontitis. In the structure of therapeutic visits, 35% are visits for periodontitis. Completed endodontic treatment is often mistaken for success. At that time, even with technically flawless root canal filling, the pathological focus in the periapical tissues persists for a long time, creating the risk of relapses and complications. The need for retreatment of the canals of the teeth exceeds the need for their primary treatment. To this day, chronic apical periodontitis is the main cause of tooth extraction and the occurrence of inflammatory odontogenic processes in the maxillofacial region and focal-caused organic diseases. In addition, inflammatory processes in periapical tissues are a source of auto- and heterosensitization of the body, reduce immune resistance, leading to disability, becoming a socially significant problem [12,15,32,55,156].

The high frequency of periodontitis, various forms of its manifestation, the occurrence of foci of chronic infection in the oral cavity, loss of teeth and, as a result, a decrease in working capacity indicate the need to improve the effectiveness of the treatment of this pathology. Currently, caries and its complications are widespread. At the same time, the frequency of high-quality endocanal treatment is low, many teeth have to be removed, including against the background of somatic pathology, especially in middle-aged and elderly people.

The inflammatory process in the periodontium is the main reason for tooth extraction. The most common cause of tooth extraction is chronic periodontitis 80-98%. The occurrence of acute inflammatory processes such as periostitis, abscess, phlegmon, lymphadenitis, osteomyelitis is associated with chronic periodontitis and the number of such patients in clinics and hospitals not only does not decrease, but tends to increase [9,35,51,67,123,194].

According to the literature, in the contents of the root canals with untreated apical periodontitis, microbial associations are determined, consisting of 2-5 species and less often pure cultures of microorganisms.

According to the method of penetration of bacteria, infectious periodontitis is divided into intradental and extradental (intradental and extradental).

During the carious process, conditions arise for the penetration of microbes through the dentinal tubules into the pulp, which leads to pulpitis. Further spread of microbes and their metabolic products causes the development of periodontitis and its complications of periapical abscess.

Chronic odontogenic foci of infection in the oral cavity include chronic ulcerative pulpitis, pulp necrosis, chronic apical periodontitis, periodontitis, chronic pericorontitis, chronic sinusitis, chronic osteomyelitis.

The nature of the microflora that causes odontogenic inflammation, at the end of the last century, was defined as a "mixed infection", in which coccal forms, bacilli, vibrios and occasionally spore-bearing bacilli were sown.

However, the impact of pathogenic bacterial microflora on the periapical tissues is associated with the progression of the inflammatory process in the pulp and its destruction.

The intradental spread most often occurs due to untreated caries and its complications, when microorganisms, their toxins, decay products penetrate into the pulp and then into the periapical tissues through the opening of the root canal of the tooth. Thus, there is a communication between the oral cavity and the external environment with the periodontium.

The root canal is a special ecological niche in which conditions are created for selective selective reproduction of a limited group of representatives of the microflora of the oral cavity. The conditions in the root canal system are most favorable for the growth of anaerobic microflora capable of fermenting amino acids and peptides, which needs an environment with a low redox potential. The share of obligate anaerobic pathogens in the microbial plaque of infected root canals accounts for up to 85-98% of all isolated types of pathogens. The most important virulent bacteria include representatives of the Bacteroides group and other gram-negative obligate anaerobic rods, including Fusobacterium nucleatum, Peptostreptococcus micros, Peptostreptococcus anaerobius, Eubacterium alactolyticum, Eubacterium lentium, Wolinella recta.

In periodontal disease, many microorganisms are detected both independently and in combination with others. Until 1976, no correlation was established between any microorganisms of the root canal and the clinical course of periodontitis. Bacteriological examination of necrotic pulp tissue in all teeth with acute periapical inflammation (tenderness, swelling and exudation) isolated Bacteroides melaninogenicus, which were not present in teeth without these symptoms. These bacteria are always present along with some other microorganisms (Peptostreptococcus anaerobius, Peptostreptococcus micros and Campylobacter sputorum).

When studying the microflora of teeth without periapical x destructive processes, microbial growth was obtained only in 28% of cases, other authors found that "the greater the periapical destruction, the more anaerobes were detected." The rapid development of an

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exacerbation of the disease in the periodontium, including "provoked" by endodontic treatment, is called a "phoenix abscess".

Periodontitis is stated as a disease caused by polybacterial flora. The composition of the microflora in chronic periodontitis is diverse, obligate non-spore-forming anaerobic microorganisms predominate, the share of which is 85–98% of all isolated pathogens. Among the most important pathogens associated with the development of chronic periodontitis are representatives of the Bacteroides group and other gram-negative obligate anaerobic rods, including Fusobacterium micleatum, Peptostreptococcus micros, Peptostreptococcus anaerobius, Eubacterium alactolyticum, Eubacterium lentium, Wolinella recta, Campylobacter sputorum (Manak T. V.2019).

LITERATURE:

1. O.A. Mukimov, D.R. Isanova // Comparative characteristics of the root membrane method and the traditional (simultaneous) method of implant installation / Young scientist. - 2019. - No. 13 (251). - S. 8 -89. [PubMed][Google Scholar]
2. Usmanova D.R., Muqimov O.A., Diego Lops, Mukimova Kh.O., Turgunov M.A. alveolar segment./ "STOMATOLOGY".-2021.- No. 1.- C.-73-76. [PubMed][Google Scholar]
3. Muqimov OA1, Usmanova DR2, Features Of Periodontal Care For Patients Living In Rural Areas. Page 1 European Journal of Molecular & Clinical Medicine ISSN 2515-8260 Volume 07, Issue 03, 2020 [PubMed] [Google Scholar]
4. Tojiyev F. I., Azimov A. M., Aralov M. B. Etiology, Classification, Frequency of Bone Defects and Lower Jaw Deformation (Literature Review) // CENTRAL ASIAN JOURNAL OF MEDICAL AND NATURAL SCIENCES. - 2021. - Vol. 2. - No. 4. - S. 31-35.
5. Azimov A., Azimov I. THERMAL IMAGING OF THE FACE OF PATIENTS WITH ACUTE ODONTOGENIC OSTEOMYELITIS OF JAWS IN CHILDREN AND ADULTS //Journal of Dentistry and Craniofacial Research. - 2020. - Vol. 1. - No. 1. - S. 55-58.