

MODELS AND METHODS IN MODERN SCIENCE

International scientific-online conference



ERRORS AND COMPLICATIONS WHEN TREATING PULPITIS

Ilkhomjonova Sevara Tulkinovna Abdullaeva Parizoda Rustamovna Akhmedov Dilshod Khabibulloevich Zoirov Tulkin Elnazarovich

Samarkand State Medical University
Department of Therapeutic Dentistry
https://doi.org/10.5281/zenodo.14842252

Abstract. Inflammation of the dental pulp is a common disease encountered in the practice of a dentist. According to various authors, in the structure of dental care in terms of visits, patients with pulpitis range from 14 to 30%. This article discusses errors and complications in the treatment of pulpitis.

Key words: Pulpitis, tooth canals, microorganism, outer layer of tooth protection, blood poisoning.

Pulpitis is an inflammatory reaction of the bundle of vessels and nerves located under the enamel and dentin of each tooth. Living tissue feeds the pulp, but becomes extremely vulnerable as soon as caries overcomes the hard tissue of the enamel. Also, pulpitis with injuries, blows that occurred with a fracture of the dental crown. Errors and obligations when pulpitis exits are directed due to the incorrect rotation of the tooth.

The main reason for the development of pulpitis is the destruction of the outer protective layer of the tooth. Hard tissues protect the pulp from the penetration of various bacteria, which provoke inflammation. As soon as the protective layer disappears, the internal cavity is immediately attacked by microorganisms. Less often, pulpitis occurs as a result of blood poisoning. Microorganisms enter the pulp through the blood vessels, causing inflammation

Focal pulpitis is the initial stage of the disease. It is characterized by the initial processes of the pulp and a small degree of its damage. The main symptoms are toothache from various irritants, which intensifies at night. At this stage of the disease, there are high chances to cure it without complications. If you detect the first signs of pulpitis, you should immediately visit your dentist. Only timely diagnosis of the disease and its treatment will allow you to save the tooth and avoid complications. Their development is associated with the infectious nature of the disease. If you neglect pulpitis and allow it to develop, complications such as sepsis or brain abscess are possible.

It occurs as a result of the development of inflammatory processes and the formation of abscesses. It is characterized by complete damage to the inner part of the tooth. With diffuse pulpitis, pain is felt constantly or infrequent severe



MODELS AND METHODS IN MODERN SCIENCE

International scientific-online conference



attacks. In addition to the tooth, the pain spreads to the ear, jaw, temples. The pain intensifies under the influence of high temperatures. When cooled, it subsides. The danger of this type of pulpitis is the risk of developing a chronic form.

The chronic form of pulpitis is divided into four types: fibrous, gangrenous, retrograde, hypertrophic.

Fibrous pulpitis is the first stage of the development of the chronic form of the disease. It is characterized by the death of nerve tissue. Because of this, the intensity of pain decreases. At this stage, the patient may mistakenly believe that the disease goes away on its own. However, if measures are not taken to treat the disease, the processes of complications begin, as a result of which the pulp will have to be removed. In especially advanced cases, complete surgical removal of the tooth and its replacement with a prosthesis is allowed. The retrograde form is characterized by the development of periodontal pockets - an accumulation of bacteria in the root of the tooth. This provokes their development and spread to other parts of the human body. Depending on the location of the bacterial sites, various complications may develop. So, from the upper jaw, complications may go to the brain, mucous membranes of the nose or prenasal sinus. Destruction of the jaw, inflammation of the gums is possible. From the lower part, the throat and gastrointestinal tract often become inflamed. The danger of this form lies in complications on the bone tissue of the jaw. The development of destructive processes in the bone tissue of the jaw and other healthy teeth is possible.

The main symptom of the disease is a sharp throbbing pain in the tooth. It occurs due to temperature changes, exposure to alkalis, acids, or tactile contact with the inflamed tooth. These are common symptoms. The disease has several stages: acute and chronic. The acute stage is divided into two types: focal and diffuse.

Pulpitis is treated in two ways: conservatively and by amputation. The conservative method is used in cases where the disease is just beginning to develop. With this method of treatment, the tooth can still be saved by completely removing the inflammation. It is used in the focal and diffusion stages of the disease. The conservative method of treating pulpitis consists of getting rid of caries (if any), cleaning the inner cavity of the tooth from infection and installing a filling.

Inflammation is removed using medications: pastes, enzymes.
Preparations based on calcium hydroxide.

FRANCE

MODELS AND METHODS IN MODERN SCIENCE

International scientific-online conference



Anti-inflammatory pastes and proteolytic enzymes are used to eliminate inflammation. They are placed on the bottom of the tooth and covered with a filling. At the same time, the canals are cleaned. Proteolytic enzymes relieve swelling, inflammation, and prevent the development of tissue necrosis. Calcium hydroxide enters the dentin tissue, stimulating its growth and protecting the pulp from bacteria. However, conservative treatment of pulpitis can cause complications in chronic forms, since their treatment is carried out only by removing the pulp.

There is a complete and partial method of amputation treatment of pulpitis. With the vital method, the pulp is completely removed, the canals are cleaned, and the formed cavity is filled. This method allows you to preserve the hard layer of the tooth with proper surgery and care. This will preserve the chewing functions of the tooth and the aesthetic appearance of the oral cavity. However, such a tooth is demanding in care. The operation itself is carried out in just one visit to the dentist's office.

Devital or partial pulpitis treatment is prescribed when it is not possible to completely remove the pulp. This is usually due to the small width of the canals. In this case, the pulp is removed in places where it is possible, and the rest is mummified. Affected areas of the tooth that cannot be removed surgically are treated with a special antibacterial paste to prevent the development of the disease. The removed areas are covered with a filling. This method can prevent the development of complications and save part of the tooth.

The basis for preventing any disease is its prevention. In the case of oral diseases, you should take care of dental hygiene. Note the signs of the development of any possible diseases. Conduct regular examinations in dental offices. Use a suitable toothbrush to prevent damage to the gums and the development of their infection.

If any pain occurs in the teeth, you should check with a dentist. Timely detection of the disease is the key to its successful treatment. In the case of pulpitis, this will save the tooth and its functions. Regular check-ups will also help to avoid the development of complications and chronic forms of oral diseases.

For teeth with significant changes in periapical tissues, microsurgical tooth-preserving operations are indicated. It is necessary to know what errors and complications can occur at each stage of pulpitis treatment.

References:

1. Therapeutic dentistry. Part 1. Dental diseases / edited by E.A. Volkov and O.O. Yanushev ch. – Textbook. – M., "GEOTAR – Media", 2013 – 236 p.



MODELS AND METHODS IN MODERN SCIENCE

International scientific-online conference



- 2. Therapeutic dentistry / edited by prof. E.V. Borovsky. Textbook. M.: Medical information agency, 2011 800 p. ISBN 978–5–8948–1726–2.
- 3. Maksimovsky Yu.M., Mitronin A.V. Therapeutic dentistry. Guide to practical classes. Study guide, M.: GEOTAR Media, 2011 459 p.
- 4.https://ls-stom.ru/informatsiya-dlya-patsientov/lechenie-pulpita-i-ego-oslozhnenij
- 5.https://drlopaeva.ru/blog/therapy/lecheniye-zubov/oshibki-i-oslozhneniya-pri-lechenii-pulpita-zuba