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Use of Innovative Technologies in the Treatment of Periodontitis

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Abstract: Periodontium (lat. Periodontium) is a complex of tissues located in the fissured space between the cementum of the tooth root and the alveolar plate. Its average width is 0.20-0.25 mm (Wikipedia).

The periodontium contains nerves, blood and lymph vessels that supply the tooth. The main functions of the periodontium are trophic (nutrition of the teeth) and shock absorption: when chewing food, the connective tissue absorbs the load on the tooth and distributes it evenly to the bones.

Keywords: Signs, symptoms, prevention, early prevention.

Periodontitis is inflammation of periodontitis.

There is acute and chronic periodontitis. Acute periodontitis is less common. This is explained by the fact that due to the leakage of the contents, periodontitis can continue for a long time without symptoms of the disease (it flows, everything around the tooth is inflamed, and you do not feel anything).

Most often, the cause of periodontitis is untreated caries or poorly treated tooth roots (infectious periodontitis).

Root canals that are not properly treated and sealed are a source of chronic infection and are ready to deteriorate at any time. Fragments of tools can often be found in such channels.

In addition, traumatic and medicinal periodontitis are distinguished. Trauma is very common (bruises, falls), but medical ones are becoming less and less, because today dentists are increasingly using pastes containing arsenic, phenol and other dangerous drugs to treat root canals.

Symptoms

Periodontitis manifests itself as a sharp pain in the area of the tooth, which is aggravated by touching it. Swelling of the lips, cheeks, gums has increased, the tooth is mobile. Sometimes there is a hole in the gum that oozes pus. This is a fistula, that is, a channel formed for the outflow of contents from an infected cavity.

Chronic periodontitis can appear in the form of unpleasant and mild pains (heaviness, fullness, discomfort, pain when chewing the load on the tooth).

Chronic periodontitis may not manifest itself for a long time and may be accidentally detected on an X-ray during the treatment of adjacent teeth.

Treatment

Periodontitis treatment methods are divided into the rapeutic and surgical. As a result of the use of some methods, it is possible to destroy the focus of inflammation in the periodontium, as a result of the use of others, the destruction of the tooth is achieved;

Surgical methods of treatment of periodontitis

Surgical treatment is used in cases where therapeutic treatment of periodontitis has failed or is impossible for some reason.

Objective reasons for the impossibility of the appendic treatment, for example, destruction of bone tissue on top of a large root; the presence of peri-radicular cysts of teeth; root canal obstruction. Subjective causes, for example, canal obstruction due to a fragment of an endodontic instrument stuck in the canal.

Radical surgical treatment of periodontitis involves removal of the diseased tooth. If conditions allow, they try not to remove the tooth completely, but instead perform a tooth-saving surgical operation - resection of the apex of the tooth root.

Therapeutic treatment of periodontitis begins with mechanical removal of infected dentin (hard tissue inside the tooth) from the inner walls of the root canal. For this, a layer of internal canal tissue is removed using special endodontic instruments. During mechanical treatment, the root canal is washed several times with antiseptic solutions: sodium hypochloride, chlorhexidine. A special ultrasonic tip allows to improve the quality of antiseptic treatment: under the influence of high-frequency vibrations, the antiseptic in the root canal penetrates deeper into the tissues of the tooth root and eliminates the infection better.

An additional effective method of treating periodontitis is the use of laser technologies: a light guide is inserted into the lumen of the root canal and everything inside is irradiated. Laser radiation also kills microbes very well and gives good results in the treatment of periodontitis in combination with other methods.

At the end of the treatment, the root canal is tightly filled with gutta-percha.

Forms of periodontitis such as granular periodontitis, apical periodontitis, exacerbation of chronic periodontitis, granulomatous periodontitis (granuloma) are suitable for therapeutic treatment.

With successful therapeutic treatment, the symptoms of periodontitis disappear and the destroyed periodontal tissues are restored.

The availability of tools in capable hands - a device for determining the length of the canal, ultrasound, diode laser - allows successful treatment of periodontitis in one visit without the use of antibiotics and anti-inflammatory drugs. This is confirmed by an X-ray taken a few months after the end of the treatment (see pictures with the results of periodontitis treatment in our clinic

Periodontitis refers to inflammatory changes that affect the membrane of the tooth root to the adjacent tissues. In most cases, this pathology develops as a result of the carious process and the penetration of infection from the lumen of the root canals through the apical foramen located on top of the tooth root. Sometimes iatrogenic errors or trauma are the cause.

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Periodontitis is accompanied by a violation of the integrity of the ligaments responsible for fixing the tooth in the alveolus and damage to the cortical layer of the bone adjacent to the tooth. The areas of bone tissue resorption, that is, resorption, as well as the cystic spaces that appear against this background, can be of different sizes. If the treatment of periodontitis is not started

on time, cysts can not only develop fistula, but also tooth loss, osteomyelitis, general intoxication and even sepsis are possible; Therefore, the specialists of our "Healthy Smile" dental clinic draw the attention of patients to the fact that self-treatment and wait-and-see tactics for acute and chronic periodontitis are unacceptable under any circumstances.

Today, our clinic offers the most effective and modern methods of periodontitis treatment. Regardless of the stage and type of this disease, the fight against it is always carried out step by step. Our specialists make every effort to achieve complete treatment and save the patient's tooth.

First of all, they conduct an X-ray diagnosis, then with the help of endodontic instruments and a dental microscope, they carefully clean the cavity of the affected tooth from infected pulp and remnants of old fillings, and disinfect the root canals by repeatedly washing them, with antiseptic solutions.

Doctors use a special ultrasonic tip that transmits high-frequency vibrations to ensure that the antiseptic penetrates deeper into the tooth tissue and provides the highest quality treatment against infection. In addition, laser therapy is a very effective method of conservative treatment of periodontitis in Moscow. It consists in introducing a special laser light guide into the dental canal. With its help, the tooth is illuminated from the inside. Practice shows that laser radiation, which has a good antimicrobial effect, in combination with other current methods, gives excellent results in the complex treatment of periodontitis. At the final stage, the root canals are reliably and firmly filled with gutta-percha and the tooth crown is restored.

Radical surgical treatment of periodontitis involves removal of the affected tooth. If possible, doctors try not to completely remove the diseased tooth, but perform a tooth-saving operation apicectomy, which consists of resection of the apical (apical) part of the tooth root.

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