

TREATMENT AND PREVENTION OF DENTAL DISEASES AMONG EMPLOYEES WORKING IN MINES OF NATURAL RESOURCES

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Abstract. *Toothache is a word that scares children and adults, men and women. One of the main causes of severe pain in the teeth is caries. This disease can be dangerous in different degrees, but it must be treated in any case. In the article, we will talk about the most effective methods of caries treatment, as well as the prevention of the disease.*

Keywords: *tooth, caries, prevention, stomatologist, oral hygiene, toothbrush, toothpaste.*

Types of caries (cavity) and dental diseases.

There are three different types of caries: anatomical, topographic and clinical. Anatomical classification mainly consists of enamel caries, dentine caries, cement caries. Based on the depth of the disease, the topographical classification is divided as follows: spot-shaped caries, surface caries, medium caries and deep caries. According to the clinical course, there are fast and slow caries. According to the clinical appearance, there are white and pigmented spots (from brown to brown). In the tests, it was found that the caries is white when it progresses rapidly, and pigmented when it progresses slowly. Caries progression is of great importance in creating a treatment plan.

Caries cavities are divided into V class according to Black's classification:

Class I fissures of small and large food teeth, caries cavities located in natural traces;

Class II caries cavities located on the contact surfaces of premolars and molars;

Class III caries cavity on the contact surfaces of the pile and the incisors, where the integrity of the incisal edge is preserved;

Class IV caries cavity on the contact surface of the incisors and the intact pile of the incisal edge angle;

Class V caries cavities located in the neck of vestibular and oral surfaces of teeth.

Spotted caries

Patients usually do not report any subjective sensations in caries in the form of spots. In some cases, patients complain of toothache. A change in color is observed on the surface where enamel demineralization is limited, from white, light brown, dark brown to brown. The disease begins with the loss of enamel luster in the limited part of the tooth. Usually, such changes are located in the neck of the tooth. When probed, this surface is smooth and painless. In the vital staining test, the stain is blue. In EOD, the dental pulp responds to 2–6 μ A. Transillumination is determined regardless of the size and location of the spot. Spotted caries is compared with fluorosis and hypoplasia.

Surface caries

A spot formed by surface caries is formed as a result of destructive changes in the place of caries. The patient complains of short-term pain caused by sweet, salty, sour chemical effects. If

the cavity of the caries is located in the neck of the tooth, pain may also appear from the thermal effect. A small defect is detected during inspection and probing. The defect is located only in the enamel layer. Electrical sensitivity is equal to 2-6 μA . In the detection of surface caries, hypoplasia, tooth erosion, with a pitular defect a comparative diagnosis is carried out.

Middle caries

Wisdom tooth affected by caries on the left side of the upper jaw

In medium caries, the defect passes through the border of enamel and dentin and has an average depth. In most cases, the patient does not feel pain. In rare cases, patients complain of short-term pain caused by thermal, mechanical, chemical effects. During the examination and probing, it is determined that there is a cavity of caries with an average depth, due to the presence of softened dentin at the bottom of the cavity. In the diagnosis of secondary caries, a comparative diagnosis is made with pitting defect, erosion, chronic periodontitis.

The symptoms of hypoplasia, erosion, and acne-like defects were described above. When conducting a comparative diagnosis with chronic periodontitis, attention is paid to the following. When sharpening the middle caries sensitivity is present at the border of enamel and dentin. There is no sensitivity in chronic periodontitis. Electrical sensitivity is equal to 2-6 μA in medium caries and 100 μA in periodontitis.

Deep caries

Deep caries is characterized by short-term pain caused by all kinds of effects. The pain stops after receiving the effective treatment. Examination reveals a deep carious cavity with softened dentin. When probed, the bottom of the cavity of caries is painful, electrical sensitivity is equal to 2-6 μA , but in some cases it is equal to 10-12 μA . When determining deep caries, a comparative diagnosis is made with medium caries, acute partial pulpitis and chronic fibrous pulpitis. With pain caused by middle caries effects, differs by the depth of the cavity. The origin of pain from pulpitis differs by the duration of the pain. Pulpitis have an electrical sensitivity of 15-20 μA .

An early sign of caries — appearance of black spots on tooth enamel. If these stains are not paid attention to, the diameter of the caries may increase and the pathology may spread deeper into the tooth tissue and create a "hole". When caries breaks through the tooth enamel and dentin, it reaches the pulp (soft tissue of the tooth) and can cause severe pain. Inflammation of the pulp is called pulpitis.

Depending on the degree of damage to the tooth, caries are divided into spots (discoloration of the tooth surface), superficial caries (surface damage), medium caries (the upper part of the dentin is damaged) and deep caries (the dentin is almost completely damaged and has reached the pulp). In addition, caries of enamel, dentine and root cement are classified separately - in root cement caries, the disease appears under the gums.

Depending on the place of occurrence, fissure (occurs in the cavity of the tooth), proximal (between the teeth) and cervical caries (near or below the gums) are classified. In addition, there are caries of the front teeth, which have a negative effect on the aesthetics of the smile. Usually, when the front teeth are damaged, even those who are afraid of dentists immediately turn to them.

In order to avoid a visit to the dentist, you need to independently examine the oral cavity. If you detect caries at an early stage, you can stop it even without the help of a dentist.

Caries treatment is local and general. Treatment measures of a general nature are aimed at increasing the protective forces of the human body and tissue resistance. For this purpose, B, D, E

vitamins and mineral components are recommended to the patient. For example, calcium gluconate, phytin. Local treatment depends on the tissue changes. In caries in the form of spots, the tissues are not sharpened, and the lost mineral components are introduced into the demineralized area where the spot is formed. For this, remineralizing solutions are applied. The main components of these solutions are calcium, phosphorus, fluorine. The effectiveness of remineralization therapy is determined by conducting a vital staining test. It is recommended to use toothpastes containing fluoride. For the treatment of teeth with carious cavities, the tissues with pathological changes are removed. In the treatment of medium caries, the cavity of the caries is sharpened, shaped, dried, and then a permanent filling is placed first.

In the treatment of deep caries, a therapeutic ointment is applied to neutralize the microflora of the caries cavity and prevent inflammation of the pulp. Pastes containing calcium hydroxide are used as healing ointments. After healing ointment, separating aqueous dentin, phosphate cement base is restored with permanent filling. In surface, medium and deep caries, it is necessary to remove the pathologically changed tissue. For this, the tooth is sharpened. Tooth sharpening is one of the main stages of caries treatment. Regardless of the caries cavity class, sharpening and caries cavity formation consists of the following stages.

1. Anesthesia if necessary.
2. Opening the cavity of caries.
3. Expansion of caries cavity and necrotomy (removal of softened and pigmented dentin).
4. Formation of the cavity. Pathologically changed tissues are removed based on the principle of preserving healthy tissues during sharpening of the cavity of caries.
5. After the caries cavity is formed, it is filled in order to restore the anatomical shape and functional state of the tooth.

A cavity is prepared for filling. It consists of the following stages:

1. Preparation of tools needed for filling;
2. Preparation of filler raw materials;
3. Protection of the cavity to be filled from saliva;
4. Drying the cavity;
5. Put a separating matrix if the hole is on the contact surface;
6. Preparation of filling raw materials;
7. Re-drying the cavity;
8. Putting on diapers;
9. Insertion of filling material into the cavity;
10. Forming, grinding and polishing the filling;
11. Isolation of the filling from saliva.

Tooth decay is a type of dental disease that occurs among mining employees.

Tooth decay, dental caries - damage to the hard tissues of the tooth; gradual erosion of tooth enamel (dentin) and cavity formation. It is common in children. Children's first molars (sixth teeth) often decay. Tooth decay is an eating disorder; indulgence in pastries and sweets; it can appear due to the lack of potassium, phosphorus and vitamins in the food, as well as the lack of wet fruits and vegetables in the food, as well as improper care of the teeth. Children's tooth decay is affected by the diet of pregnant women, improper feeding of the child, etc. to some extent. This disease is more common in places where drinking water contains less fluoride (mainly in children). In children with severe infectious diseases, especially during puberty (especially in girls), tooth

decay progresses rapidly. Tooth decay is often observed during pregnancy, because during this period, as a result of the increased demand for calcium necessary for the formation of the fetal skeleton, physiological changes occur in the mother's body, such as the activity of internal secretion glands and metabolic disorders.

Tooth decay begins without being noticeable. At first, the tooth enamel becomes dull and wrinkled, discharge or a yellowish stain appears (see Tooth); later this place becomes soft, this is called surface caries; it hurts when brushing, eating sweet and sour things. The cavity of the decayed tooth gradually deepens and passes from the enamel to the dentine, and then the middle tooth decay occurs. When it is acute, a little pain appears due to mechanical, chemical or heat-cold effects. As a result of the process of tooth decay, dentin tissue is absorbed into the pulp, softened and thinned dentin remains on the pulp; when food enters the cavity of a decayed tooth (hot, cold, water and other effects), a strong pain appears, and it stops immediately when the effect disappears; This is called deep tooth decay. If it is not treated in time, the microbe enters the soft tissue (pulp) of the tooth and inflames it - pulpitis occurs; Gradually, the tissues around the root of the tooth may become inflamed. Tooth decay is treated by a dentist. The cavity is cleaned and filled.

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