

Treatment of Reversible Pulpitis in Baby Teeth

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Annotation: Pulpitis is an inflammation of the inner structure of the tooth - the neurovascular bundle. In most cases, this disease is caused by caries - many parents believe that it is not necessary to treat it, because milk teeth need to be replaced quickly. However, this statement is incorrect, because caries, which is not treated in time, destroys teeth and causes inflammation of the pulp.

Keywords: Pulpitis, treatment, diagnosis, prevention, origin.

Primary molars, especially lower molars, are more prone to this. This is due to relatively thinner enamel - the infectious process reaches the internal structures of the tooth faster. For the same reason, pulpitis develops much faster in children than in adults.

Among the causes of the disease, there are also injuries associated with improper treatment of enamel caries, when the doctor accidentally exposes the pulp during tooth preparation.

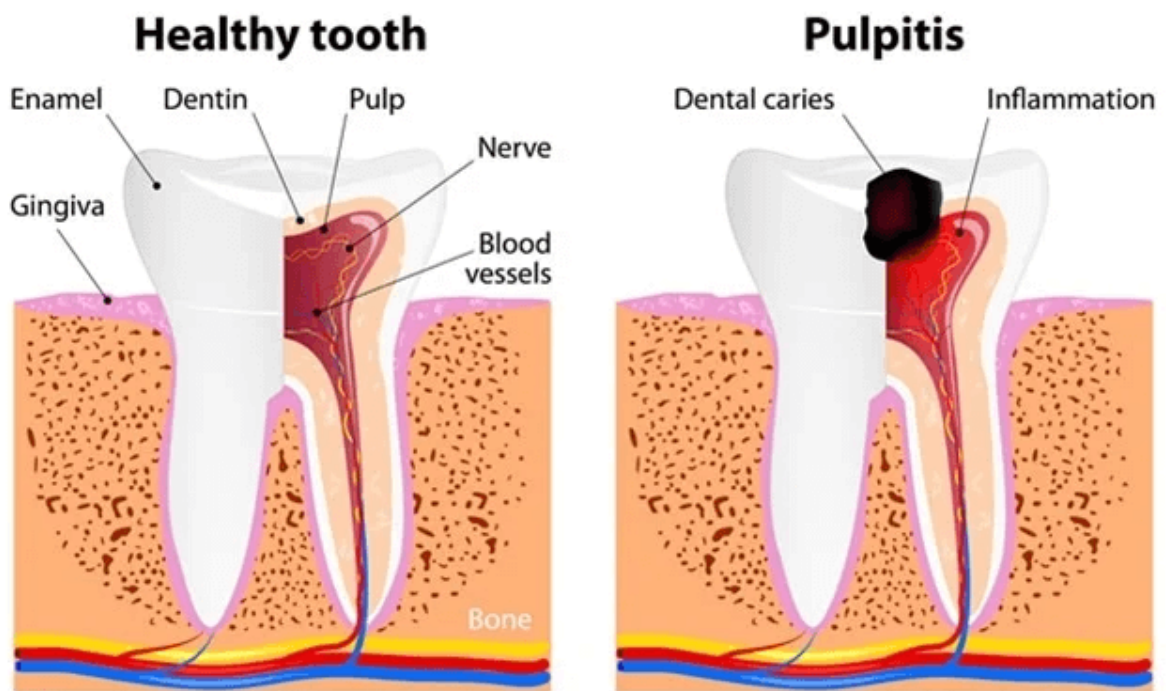
Signs of pulpitis in children

Symptoms and treatment of pulpitis in children vary depending on the form and severity of the disease. Pulpitis has two forms - acute and chronic. The first is relatively less common, but in this case the symptoms are more obvious. There are two stages of the inflammatory process:

Serous. The pulp becomes inflamed and the dental canals are filled with serous fluid. The child has a strong pain in the tooth, which worsens at night or with aggravation - the cause is chewing on the side of the tooth. Often there is only one episode of pain. In a few hours, the inflammation goes to the next stage.

Purulent . Purulent content begins to form in the root canals of the tooth. The severity of this stage depends on several parameters: the state of the child's immune system, the activity of microorganisms, the state of the root system of the tooth and the age of the young patient. If the child's immunity functions normally, microorganisms multiply slowly and pus comes out through the carious cavity of the tooth, the pain can be tolerated. However, there are often significant pains, long-lasting attacks, and unpleasant sensations spread to other teeth. They are aggravated by

mechanical and temperature effects on the inciting tooth, the child's appetite worsens or he completely refuses food; In rare cases, an increase in body temperature and enlargement of lymph nodes are observed.



It is worth noting that chronic pulpitis can be asymptomatic, and there are often cases of the development of an inflammatory process in a previously filled tooth. The fact is that it can be very difficult to properly treat a child's tooth cavity before filling it - this is due to the patient's emotional state and the forced rush of the dentist. This leads to the fact that the filling is installed in a cavity that is not sterile or is not sufficiently dried from saliva - pathogenic microorganisms continue to multiply and penetrate deep into the tooth, causing pulpitis.

With chronic pulpitis, pain can occur only when food remains fall into the carious cavity. The gangrenous form of the disease is characterized by the appearance of pain, a feeling of fullness and heaviness in the tooth, and breathing through the mouth.

When should you visit the dentist?

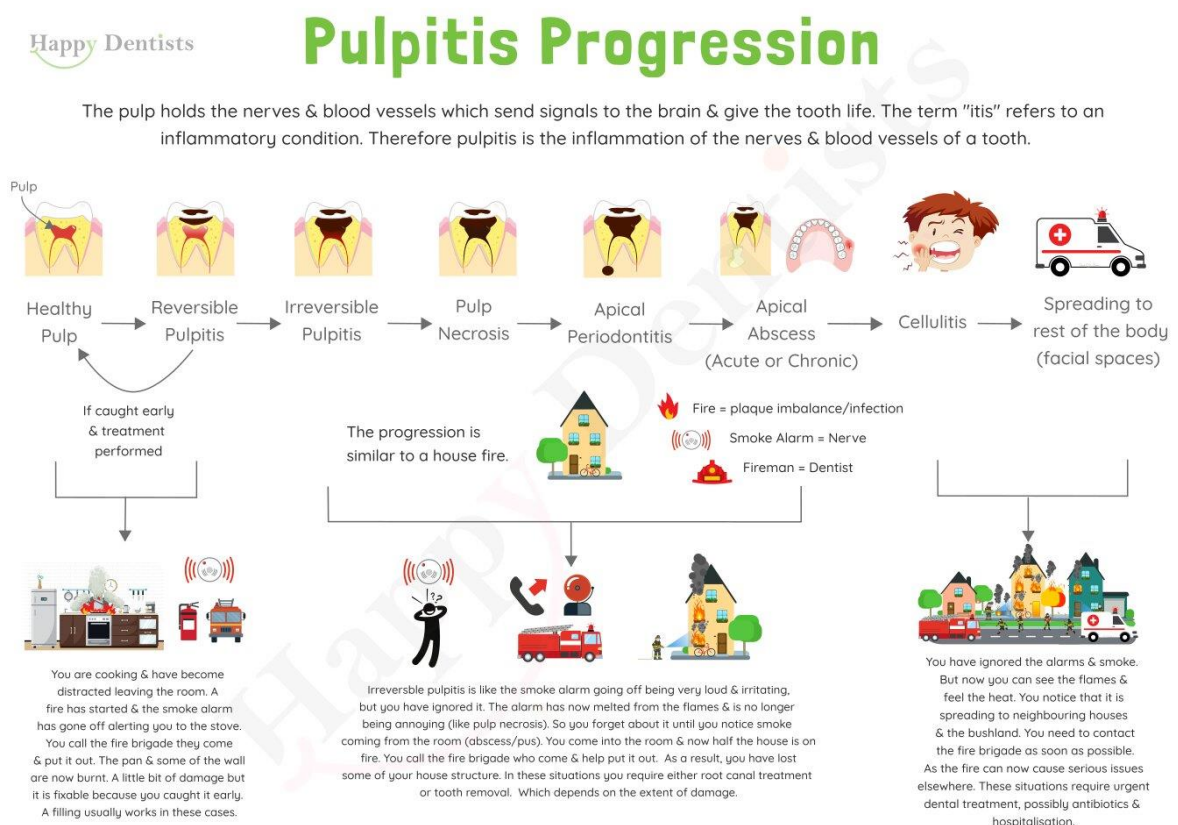
The sensitivity of the neurovascular set of a child's tooth is lower than that of an adult, so its signs of inflammation can be erased or completely absent. When the first signs of caries appear - when a dark spot appears on the tooth or when the child complains of pain, it is important to contact a pediatric dentist. You should hurry to visit in the following cases:

- a. severe pain;
- b. increased pain when eating hot or cold food / drinks;
- c. bad breath;
- d. increase in body temperature;
- e. inflammation of the gums around the tooth;
- f. enamel darkening.

Pulpitis of a milk tooth: is it necessary to treat?

Treatment of pulpitis in children should be carried out in any case and as soon as possible. It is unacceptable to just stop the symptoms and wait for the baby tooth to fall out. Failure to help the child can cause serious complications - periostitis (in common language - gumboil), periodontitis

- inflammation of periodontal tissues. In addition, the infectious process in the neurovascular bundle of the milk tooth can spread to the permanent tooth.



If a long time has to pass before the eruption of a permanent tooth, the premature death of a baby tooth due to pulpitis can lead to incorrect occlusion - successive displacement of healthy teeth, changes in their position, will require complex orthodontic treatment in the future. .

If the baby tooth with pulp will soon be replaced by a permanent tooth, the doctor may resort to extraction. In any case, this disease should not be ignored.

Methods of treating pulpitis

The tactics of the pediatric dentist depend on the condition of the child's teeth and dental system, the severity of his condition and the presence of concomitant diseases of the oral cavity. If the pulpitis is very severe and threatens his health, the tooth should be removed. However, in most cases, it is possible to keep the tooth permanently until it is replaced naturally, because the removal can lead to a violation of the bite or the condition of the remaining healthy teeth in the row.

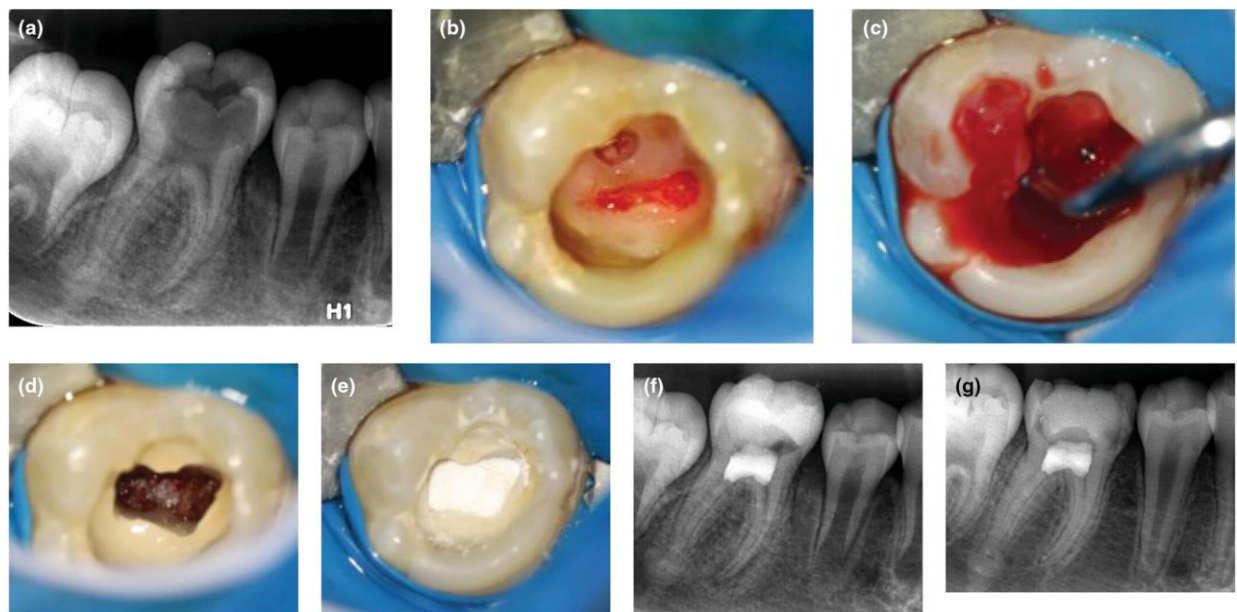
Conventional treatment of dental pulpitis in children consists of devital amputation of the pulp, which is performed in several visits. The stages of treatment of pulpitis in children are as follows:

The doctor opens the tooth cavity, removes the carious tissue and applies the paste to devitalize the pulp. It is designed to "kill" the neurovascular bundle and relieve pain. If the paste contains arsenic, it is used for 1-2 days, if an arsenic-free product is used, it is used for at least 7 days.v

The second visit involves placing a special mixture in the canals for embalming the tissue - a mixture of resorcinol and formalin is used.

The third visit is to fill the diseased tooth.

Today, this method is used less often, because the infectious process can continue in unclosed dental canals - mummification of the pulp involves its "drying" and the formation of cavities where pathogenic bacteria continue to multiply.



A modern approach to treating pulpitis of primary teeth in children is extirpation - complete removal of the inflamed pulp. This can be done with or without prior killing or devitalizing the pulp. In most cases, devitalization is preferable because it relieves the child of any unpleasant sensations during the removal of the neurovascular bundle.

After the dental canals are freed from the pulp and carefully processed, the doctor fills them with an anti-inflammatory paste - it dissolves along with the roots during the natural transformation of the teeth into permanent teeth. Zinc eugenol paste is often used for this purpose. This method of treatment is relatively more effective, and if the canals are treated very carefully, the infection will not reactivate. Other modern methods of treating pulpitis in children include vital amputation. It consists in preserving the vitality of the pulp part - the upper part of the nerve is removed under local anesthesia, and a drug with antibacterial and anti-inflammatory effects is applied to the remaining root pulp. The drug closes the lower part of the neurovascular bundle without affecting its viability, and the tooth is then filled.

Treatment of dental pulpitis with unformed roots

The root system of a milk tooth is formed for a long time after eruption, so there are often cases where caries begins to form in a tooth whose roots have not covered the apex. This leads to some difficulties in treatment:

short roots and wide canals;

the upper part of the root is the "growth" zone, damage to which prevents root formation;

the possibility of permanent tooth germ infection;

Treatment of pulpitis of teeth with immature roots in children requires special attention. The doctor must carefully monitor that the filling material does not extend beyond the expansion of the root apex. It is worth noting that it is impossible to completely remove the pulp and treat the canals - the optimal solution here is vital and devital extirpation. Pulp amputation may also be used. A biological method of preserving the vital pulp and eliminating inflammation is also often used. Its essence consists in preparing the tooth, placing a medicinal paste with calcium hydroxide, after which the tooth is filled with a temporary material. After a few days, if there are no complications and unpleasant symptoms disappear, the doctor will install a permanent filling.

How to prepare a child for treatment?

Treatment of pulpitis of primary teeth in children is a very difficult task, so it is very good if the child is already familiar with the dental chair. The first visit should be preventive - familiarization

with the office environment, doctor and equipment.

Also, the task of parents is to prepare the child psychologically. Mandatory:

- a. speak positively to your child about doctors - say that the dentist treats the teeth and makes sure that they do not hurt;
- b. playing dentist with toys and other family members;
- c. avoid mentioning pain or vague, scary terms;
- d. do not deceive the child - explain that dental treatment may not be very pleasant, but it will not last long and the tooth will no longer hurt;
- e. keep calm, if the child resists treatment, act gently but confidently;
- f. choose a suitable time to visit - it is better in the morning, when the baby is awake and active;
- g. take a toy with you to calm the child;
- h. give the doctor an opportunity to establish contact with a small patient - do not rush him;
- i. In no case do not scare the child, do not threaten, do not blackmail.

If it is not possible to fully control the situation, it will be necessary to postpone the meeting to another day. However, the disease should not be ignored - the treatment of pulpitis of milk teeth in children must be done in one way or another. In special cases, treatment under general anesthesia may be considered, but this should be discussed with the doctor.

Possible complications of treatment of pulpitis in children

Child anxiety is a major challenge that pediatric dentists face. Due to the emotional state of the patient, the specialist cannot hurry or carefully perform the manipulation, which can cause the following complications:

the paste is not applied to the nerve - this leads to the pain not decreasing and the procedure must be repeated again;

burning of the gums with the paste due to its proximity to the tooth;

bleeding when processing unformed roots;

perforation of the root of a milk tooth;

breakage of instruments in the root canal.

You can avoid possible complications or reduce the likelihood of problems by normalizing the child's psychological state and contacting an experienced, qualified doctor.

Prevention of pulpitis in children

Treatment of pulpitis in children's permanent teeth, as well as their "front" teeth, is a very complicated procedure that requires several visits to the doctor. It is easier to prevent the disease than to cure it - it is enough to pay attention to hygiene procedures and teach your child to brush his teeth properly from a very early age.

It is also important to monitor the child's diet - to strengthen the enamel with solid foods (carrots, apples, etc.), to ensure a balanced diet to saturate the bone tissue with minerals. It is better to limit sweets and give only water at night. Prevention of caries is the basis for preventing its complications, including pulpitis.

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