

## MEDICAL SCIENCES

### STUDY OF THE PROBLEM OF PREVALENCE OF PULPIT OF PRIMARY TEETH IN CHILDREN

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DOI: <https://doi.org/10.30525/978-9934-588-39-6-26>

Nowadays, the increase in dental morbidity is one of the most important problems of modern medicine. According to epidemiological studies, every year there is an increase in the prevalence and intensity of dental caries in children. This is associated with environmental changes, decreased immunity in children, the nature of nutrition and living conditions which is not only a medical, but also a social component of this problem. In addition, many parents, by virtue of their own conviction, believe that primary teeth, due to their timely change, do not need treatment and are unlikely at that moment to think that neglected forms of complications of temporary teeth can cause damage of permanent one.

The aim of our study is learning the incidence rate of children with pulpitis of primary teeth, establishing of focus for its development, considering possible ways to reduce the number of this type of inflammatory process, drawing attention to this problem.

Methods and materials: analysis of scientific literature, tabulation of summary tables based on the data obtained. Digital arrays are processed by methods of mathematical statistics using generally recognized programs (Word, Excel etc.)

Results and discussions. Caries is one of the most common diseases of the oral cavity. And, unfortunately, up to 90% of children suffer from this infection. Pulpitis of primary teeth is called inflammation of the pulp – deeply located inside the root of the connective tissue with nerves, lymphatic and blood vessels. Most often, pulpitis of primary teeth affects the molars, but it also occurs on the front incisors and canines. Due to the low strength of dentin and enamel, pulpitis develops in just a couple of months. First of all, the infection affects the enamel, then the dentin, and then it spreads to the pulp. Therefore, pulpitis of primary teeth is most often a complication of untreated

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caries. But in rare cases, the cause of inflammation can be a tooth injury and accidental exposure of nerves during dental treatment. Therefore, it is especially important for children to undergo preventive examinations at the dentist once every six months to avoid the development of infection [1, p. 242; 2, p. 22; 4, p. 52].

Dentists separate acute and chronic pulpitis depending on the course of the disease. It's acute form goes through two stages: serous, in which the pulp becomes inflamed and the channels are filled with serous fluid. Such inflammation is accompanied by severe pain in the tooth. Most often, pains overtake a child at night, as well as when chewing. Sharp pains in primary teeth with absorbable roots in just 4-6 hours go to the next stage – purulent. Purulent contents form in the channels, during this period painful sensations in very rare cases subside, as the child's immune system works well and the microorganisms in the tooth are weakened. However, more often than in 85% of cases, purulent pulpitis brings very strong prolonged pain. Often painful sensations radiate to the entire jaw, provoke temperature fluctuations, an increase in lymph nodes and the appearance of fever. Chronic pulpitis in children often occurs without symptoms. Inflammation can develop both in caries-affected tissues and under fillings. In chronic pulpitis, children often complain of tooth pain when eating cold or hot dishes and drinks, stop eating on the sick side. Gangrenous chronic pulpitis is most often manifested by pain after eating hot food. Bad breath can spread from your mouth, and your child may feel bursting and heaviness in the jaw [2, p. 23; 3, p. 90].

For the timely detection of caries and pulpitis, the child needs to visit the dentist regularly. Do not forget that the sensitivity of the pulp in children is reduced, so inflammation sometimes develops without pain. Based on the foregoing, a number of main signs of serious problems with teeth can be distinguished: pain when consuming hot or cold food or drinks; inflammation of the tissues surrounding the tooth; fever. Pain syndrome appears (with pulpitis, both mild and rather severe pain can appear). It should be noted that it can go to the area under the eye orbit, the back of the head or temple, this is a characteristic sign of developing pulpitis. The periosteum (periostitis) is inflamed. Most often only a doctor can determine that the child's periosteum has become inflamed due to pulpitis, so you would rather consult a specialist at the first suspicion of inflammation. The lymph nodes (lymphadenitis) become inflamed, with pressure on them, the child may feel pain [4, p. 37; 6, p. 125].

There are several ways to treat pulpitis in primary teeth. Conservative treatment involves the complete preservation of pulp. The dentist cleans the cavity of the affected tissue and lays a special paste. After a few days, the pain stops and the doctor establishes a permanent filling. The method of vital amputation involves partial removal of the pulp: the dentist removes the

crown and leaves the root of the pulp intact. Surgical treatment of pulpitis is the extraction of infected pulp with subsequent filling of the canals. For the treatment of primary teeth, complete amputation of the pulp is extremely rare. If the disease is in an advanced stage and the tooth cannot be saved, the dentist decides to remove it. In each case, the dentist selects the treatment individually, however, no matter what method the doctor chooses, treatment will require at least two visits.

Due to the peculiarities of treating dental diseases in children, medical errors, unfortunately, happen more often than when treating adults. Often a small patient himself becomes the culprit of such errors. It can simply prevent the doctor from correctly performing the manipulation. But they require accuracy and the full scope of activities. Therefore, children's dentists often choose the method of devital amputation using resorcinol-formalin. Most often, doctors misplace the paste, which is used to devitalize the pulp. Worst of all, if such a paste contains arsenic. If the child interferes with the quality of the tooth treatment, then the doctor can put it not on the nerve, but on the bottom of the cavity. In this case, it will not work and will even provoke more severe pain and the paste will need to be reinstalled. Sometimes the paste is mistakenly placed on or near the gum. This is due to the fact that gums can grow in the cavity. This provokes severe pain and burns on the gums. In order to prevent this from happening, it is important not to interfere with the doctor's compliance with the paste formulation technique. In order for the burn to heal soon, the doctor will prescribe a special paste or gel. They relieve inflammation and accelerate healing. One complication of treating pulpitis can be bleeding. It most often occurs in the treatment of canals. This is due to the fact that the tops of the roots are not well formed in children. During their processing, the dentist can injure the tissues that are adjacent. At the same time, it is quite difficult to stop the bleeding that has begun. Even medications do not always help. If the doctor does not have sufficient experience, then during treatment he can perforate the root. In this case, the tool often breaks in the tooth canal. But such an error happens infrequently, because in primary teeth the canals are quite wide. Nevertheless, if this happened, then periostitis and periodontitis are possible. In order to prevent such complications, the dentist needs to remove a fragment of his instrument from the channel and close the perforations. If the dentist does not have the necessary tools, then the doctor can mummify the weight of the canals using the resorcinol-formalin method [5, p. 37].

Conclusions. Based on our study, we can conclude that in order to avoid pulpitis, it is necessary to monitor the proper nutrition of the child, treat caries in time, and teach him how to brush your teeth. It is also recommended to introduce him to the dentist and conduct a visit twice a year for prevention.

With due responsibility for oral hygiene, parents will be able to protect their child's teeth not only from pulpitis, but also from other serious diseases. Specialists, in turn, need to maintain contact with the child's parents, regularly inform them of timely visits, conduct conversations, including with the child, in order to prevent the occurrence of unnecessary stress and provide themselves with the opportunity to conduct high-quality treatment.

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