

CARIES DISEASE AND THE IMPORTANCE OF ORAL HYGIENE PRODUCTS.

Kurbanova Nodira Vokhidovna
Asia International University

Abstract: Caries is a pathological process characterized by demineralization and progressive destruction of hard dental tissue, leading to the formation of a cavity-like defect.

Key words: caries, toothpastes, fluoride, saliva, microorganisms.

Caries is a common disease, affecting 95% of the population. Currently, there are several hundred theories about the origin of caries. Many factors play a role in the origin of caries.

The main factors include:

- oral microflora;
- food and diet;
- the amount of fluoride in water;
- the composition and volume of saliva;
- the general condition of the organism;
- extreme influences on the organism;
- endogenous and exogenous factors in the external and internal environment.

The main cause of caries is acid-producing bacteria, which cause the washing out of fluoride and calcium from tooth tissue. Microorganisms begin to multiply and damage the tooth 1-2 hours after cleaning the oral cavity, causing cavities. If caries is detected, you should make changes to your diet, pay more attention to oral hygiene, and also give preference to toothpastes with a high content of calcium and fluoride. A visit to the dentist is mandatory.

Prevention is a set of measures taken by state, social, hygienic, medical institutions to maintain the health of the population and prevent diseases. The main goal of prevention is to prevent the causes and conditions that cause diseases and strengthen the body. When conducting disease prevention, it is necessary to carry out treatments with a clear knowledge of its etiology and pathogenesis. Dental caries is one of the causes of tooth loss, which leads to impaired chewing function, digestive system and chronic stomach diseases. Only timely treatment of hard caries helps to save teeth.

The main preventive measures are aimed at three factors. In practice, this situation is called "complex prevention". Prevention of dental caries is conditionally divided into three:

- 1) Eliminate microorganisms in dental plaque.
- 2) Reduce the amount of sugar in the diet.
- 3) Increase the amount of fluoride in the environment.

Schematically, all preventive measures can be divided into 4 groups. Endogenous drug-free prevention of dental caries. This involves the introduction of protein, amino acids, macro- and microelements, and vitamins into the body.

1. Dietary measures, the use of calcium and fluoride-containing substances ensure the eruption and enamel formation of teeth.

2. Endogenous drug prophylaxis. Drug prophylaxis refers to the prevention of pregnant women, preschoolers, schoolchildren and adults. Calcium and fluorine preparations, vitamins, fish oil, sodium nucleoside, phytin, methionine, etc. are widely used.

3. Exogenous drug-free prophylaxis. In this case, patients are prescribed intensive chewing of solid food, oral hygiene, professional hygiene, a balanced diet, restriction of carbohydrates, replacement of sugar with sugar substitutes, rational prosthetics.

4. Exogenous drug prophylaxis. The use of local remineralizing agents is envisaged. 10% calcium gluconate solution, 2% sodium fluoride, 3% remodent, fluoride varnish and gel are applied to the hard tissues of the teeth. Prevention is carried out by means of medicated baths, rinsing with drugs, electrophoresis and rubbing them. The preventive measures of the dentist can be divided into 5 periods.

1. Antenatal.
2. Newborn and breastfeeding period (up to 1 year).
3. Pre-kindergarten period (1-3 years).
4. Kindergarten period (4-7 years).
5. School period (up to 16-18 years).

Prevention of dental diseases is good oral hygiene. Oral hygiene is carried out in two ways:

1. Personal hygiene.
2. Professional hygiene. Personal hygiene is carried out by the patient himself with personal hygiene products, namely a brush, toothpaste, floss, elixirs.

There are two types of toothbrushes.

1. Natural.
2. Artificial.

All toothbrushes are distinguished by 5 different levels of hardness:

- 1 medium soft,
- 2 soft,
- 3 medium hard,
- 4 hard,
- 5 very hard.

There are different methods of cleaning teeth: Charter, Stillman, Base, Leonard and Pokhomov methods. In Pokhomov's Standard cleaning method, the teeth are conditionally divided into 3 segments on the upper jaw and 3 segments on the lower jaw, and each segment is cleaned separately. In addition, we can clean our teeth with special dental floss, wooden and plastic toothpicks.

Toothpastes: There are types of modern toothpastes with hygienic and therapeutic properties. Therapeutic ones, in turn, are divided into toothpastes with anti-inflammatory and prophylactic properties. Anti-inflammatory ones are divided into salt-preserving and biologically active ones. Prophylactic ones are divided into fluoride-preserving and mineral-preserving ones.

In addition, there are also whitening toothpastes. Usually, people go to the store and buy the first toothpaste that suits them in price and size or the one they see first. In fact, toothpastes should be chosen with the advice of a doctor, depending on the condition of the teeth and the presence or absence of any diseases. Those who do not have any problems with their teeth can safely use ordinary hygienic toothpastes. From the water we drink to the environment we live in, everything plays a role in the health of our teeth. Hygienic toothpastes - They have a cleansing effect, renewing the condition of the mouth, and do not contain special therapeutic and preventive additives. The basis of hygienic pastes produced in Russia is usually chemically precipitated chalk

(23-43%), glycerin (10-33%), sodium salt of carboxymethylcellulose (1-1.8%), perfume oil (1-1.5%), sodium lauryl sulfate, fragrance, water, and preservatives.

Therapeutic-prophylactic toothpastes are divided into 5 groups based on the components included in their composition:

1. Containing plant substances
2. Containing salts
3. Containing enzymes
4. Containing biologically active substances
5. Toothpastes with anti-caries components

Toothpastes were widely used as a hygiene product until recently. The main cleaning agent in toothpastes is chemically purified precipitated chalk. The powder is prepared by adding odor and flavoring substances to it. Toothpastes have a stronger abrasive property than pastes, and they clean teeth well from plaque. They are less effective in eliminating bad breath. The main disadvantage is that they quickly become contaminated with microbes. The fact that toothpastes are stored in boxes and are opened frequently creates these disadvantages. Toothbrushes bring in microbes and bacteria from the external environment, and when the boxes are opened, microbes from the external environment fall out. Their spillage and scattering create inconvenience when carrying them on a trip.

Conclusion: A person should have a doctor's examination every 6 months for their health. It is necessary to observe personal hygiene and pay attention to their diet. Prevention of caries is important for human health.

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