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DENTAL HARD TISSUE EROSION

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Annotation: This article discusses pathological caries, its stages, forms, and treatment methods.
Keywords: bite, bruxism, tooth enamel, dental cusps, substitute dentin, pathological caries, symmetry.

There are physiological and pathological caries in teeth. When children have teeth, the small enamel bumps on the cutting surface of the molars gradually wear away. Normally, the teeth undergo a process of decay and formation. Pathological caries occurs as a result of impaired metabolism in the tooth and increased caries.This condition occurs in 12% of the population. The absence of caries, physiological and pathological caries can be different in dental tissues. Physiological chewing can lead to tooth erosion. A slight erosion of the enamel on the incisal edges of the canines, molars, and premolars is a physiological phenomenon. Pathological caries occurs as a result of various causes and differs in the speed of this process from the physiological process. Pathological erosion occurs in deep, incorrect, or correct bite, endocrine glands, especially thyroid glands, gonadal dysfunction, diabetes mellitus, nervous diseases, nighttime teeth grinding (bruxism), hypovitaminosis, rickets, and various other processes that cause metabolic disorders. It is also believed that heredity plays a role. If there is pathological erosion in the teeth of parents, it also occurs in their children. Eating soft or hard food also plays an important role. Under the influence of professions: in the case of a lute player, a trumpet player, a carpenter, etc., various erosions are also observed in teeth. Pathological erosion of teeth occurs in patients who constantly use vinegar in their diet; in chemical plant workers. It has been found that erosion and other changes occur in the teeth of workers at the Chirchik, Kokand, Almalyk, and Navoi chemical plants. There are mainly 2 types of tooth decay:

- horizontal

- vertical.

Occurs in one or several teeth. Depending on the depth of the pathological process, several stages are distinguished:

• the cusps of the teeth are eroded;

• the crown of the teeth is eroded to the equator;

• the crown of the teeth is eroded to the neck of the teeth.

The pulp does not open, substitute dentin is formed. If tooth decay is slow and substitute dentin is formed, there may be no pain in the teeth, but if it is fast, the pain will be severe as a result of various influences. Sharpened enamel and dentin can damage the oral mucosa. If this happens, it will be necessary to straighten it. Groshikov M.I. (1985) divided tooth decay into 3 degrees.

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• I degree — partial erosion of the enamel on the incisal edges and cusps of the crown of the tooth;

• II degree — erosion of the enamel layer of the cusps of the canines, premolar and molar teeth and the dentin of the incisal edges of the canines to the surface layers;

• III degree — the tooth cavity of enamel and dentin remains visible, but does not open, since the replacement dentin is formed in parallel.

Histologically: in the pulp — atrophy, galvanization, vocalization of odontoblasts, sclerosis, stasis, thrombosis in blood vessels. As a result of tooth decay, the bite may decrease and there may be a change in appearance.

In treatment, first of all, local causes should be eliminated. Then symptomatic treatment procedures are carried out. Sharp edges of teeth should be polished with a tool. Food should be of good quality, rich in minerals. It is recommended to take 0.5 g of calcium glycerophosphate every day for a month. Measures should be taken to eliminate hyperesthesia in the teeth. If this is not possible, then the teeth should be depulped. If it is not possible to restore the height of the hard tissue of the tooth with fillings or inlays, then the bite should be normalized using orthopedic methods - artificial crowns. Of course, the sharp edges of the teeth should be sharpened and smoothed, as they can injure the surrounding soft tissues.In the early stages of the appearance of cavities, treatments are performed to prevent their deepening. This involves soaking (application) 10% calcium gluconate, 2% sodium fluoride, which increase tooth strength, or applying them to the cavities by gum electrophoresis. In addition, in order to reduce the force of mechanical impact, the patient should be advised to brush his teeth with soft brushes and use therapeutic and prophylactic toothpastes containing fluoride (Blend-a-med, Colgate). If the cavities are deep, they can be filled directly without processing with composite filling materials (photopolymers). Sometimes, teeth with cavities are also closed with artificial crowns.

Conclusion: This disease is a non-carious disease that develops after tooth eruption, and its causes are diverse. Symptoms of the disease include changes in facial symmetry, wrinkles in the corners of the mouth, and increased sensitivity in the teeth. If not treated in time, hearing loss and pain in the temporomandibular joints may occur.

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