PULP FLOOR OF THE TOOTH

Klishbayeva Gulzar
Bukhara University of innovative education and medicine

Abstract: The pulp is the inner part of the tooth, hidden deep in its center. It consists of various types of tissues, each of which performs certain functions, providing the tooth with vitality and sensitivity.

Key words: Pulp, layers, dentin.

The cellular composition of the tooth pulp is divided into three layers: peripheral (odontoblasts in 2-4 rows), intermediate (stellate cells or endodontoblasts) and central (fibroblasts, histiocytes, macrophages, lymphocytes, plasma cells, mast cells). Pulp is soft tissue hidden under the enamel coating of the tooth and dentin. It is located in the cavity of the crown and root canals. It is often referred to as the core of the tooth. This part is the most vulnerable, so any damage or infection can bring a lot of unpleasant sensations.

Tooth pulp: description and functions

The root pulp is a connective soft tissue containing many nerve fibers and microscopic vessels that provide sensitivity and nutrition to all layers. It consists of collagen and elastin.

This layer is sensitive and vulnerable. Damage and infection of the pulp cavity can lead to the development of inflammation or pulpitis.

The structure of the molars and milk teeth is no different. It includes the following parts:

1. enamel is the top coating that protects the crown;
2. Dentin is a solid layer consisting of minerals;
3. The pulp is the most sensitive part, which is located in the dental cavity and connects to the root canals. The special structure of the pulp provides blood supply and nutrition to the tooth tissues.

The anatomy of the pulp is represented by two zones: the crown and the root. The first type of tissue is characterized by a looser structure, permeated with numerous capillaries and nerve fibers. The root part has a higher density.

The pulp consists of acids, lipids, glucose, enzymes and water. They provide oxygen consumption and processing.

The main function of the soft tissue of the tooth is to protect against inflammatory processes. This ensures and supports the vital activity of the tooth.

But other functions stand out in dentistry:

1. the plastic function involved in the formation of dentin. It is carried out thanks to odontoblasts;
2. protection of the tooth from infection in the periodontium. With weak immunity and severe infection, there is a high risk of a decrease in protective function and the development of inflammation;
3. trophic function, which consists in ensuring the supply of nutrients to the hard layers of the tooth. Such “transportation” occurs through blood vessels. When the pulp is removed or damaged, tissue nutrition stops, gradually leading to their destruction.

The pulp of milk and permanent teeth is similar in structure, but differs in thickness and volume. In children, it is more, dense and located in the crown part. This tissue develops throughout life, but over the years the regenerative processes deteriorate. This makes the vessels fragile, complicates the process of tissue nutrition and dentin formation. Similar changes occur in the elderly.

Inflammation of the pulp: causes and treatment methods

Pulpitis is the most common inflammatory process in the tissues of the dental pulp. It occurs in a third of patients who go to dentists. The process is accompanied by acute pain, the intensity of which increases by night. In the absence of treatment, soft tissue cells begin to die off, leading to periodontitis and other serious pathologies. Other symptoms of pulpitis include painful sensations of a radiating nature, hypersensitivity to sweet, cold and warm food. Discomfort can be non-localized, transmitting painful impulses to the temple or ear area. In the absence of pulp or part of it, pieces of food may get stuck in the formed cavity.

References:

1.Bykov V. L. Histology and embryology of human oral organs. — St. Petersburg, 1998.

2.Kuznetsov S. L., Torbek V. E., Derevyanko V. G. Histology of the oral cavity organs. — Moscow, 2012.