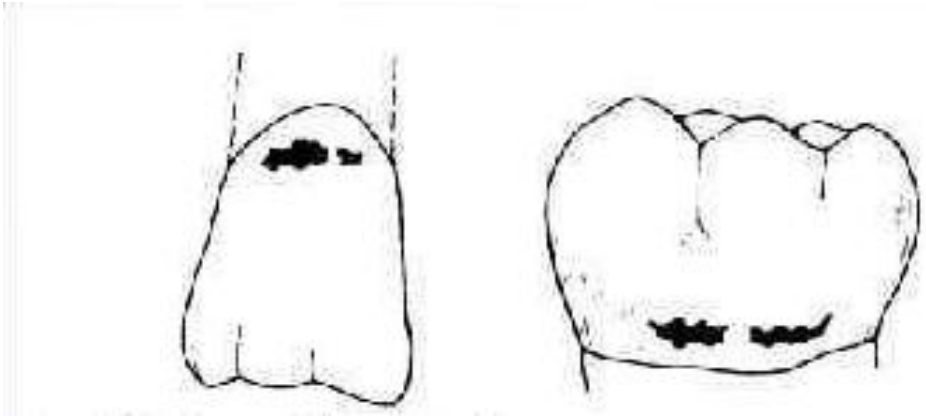
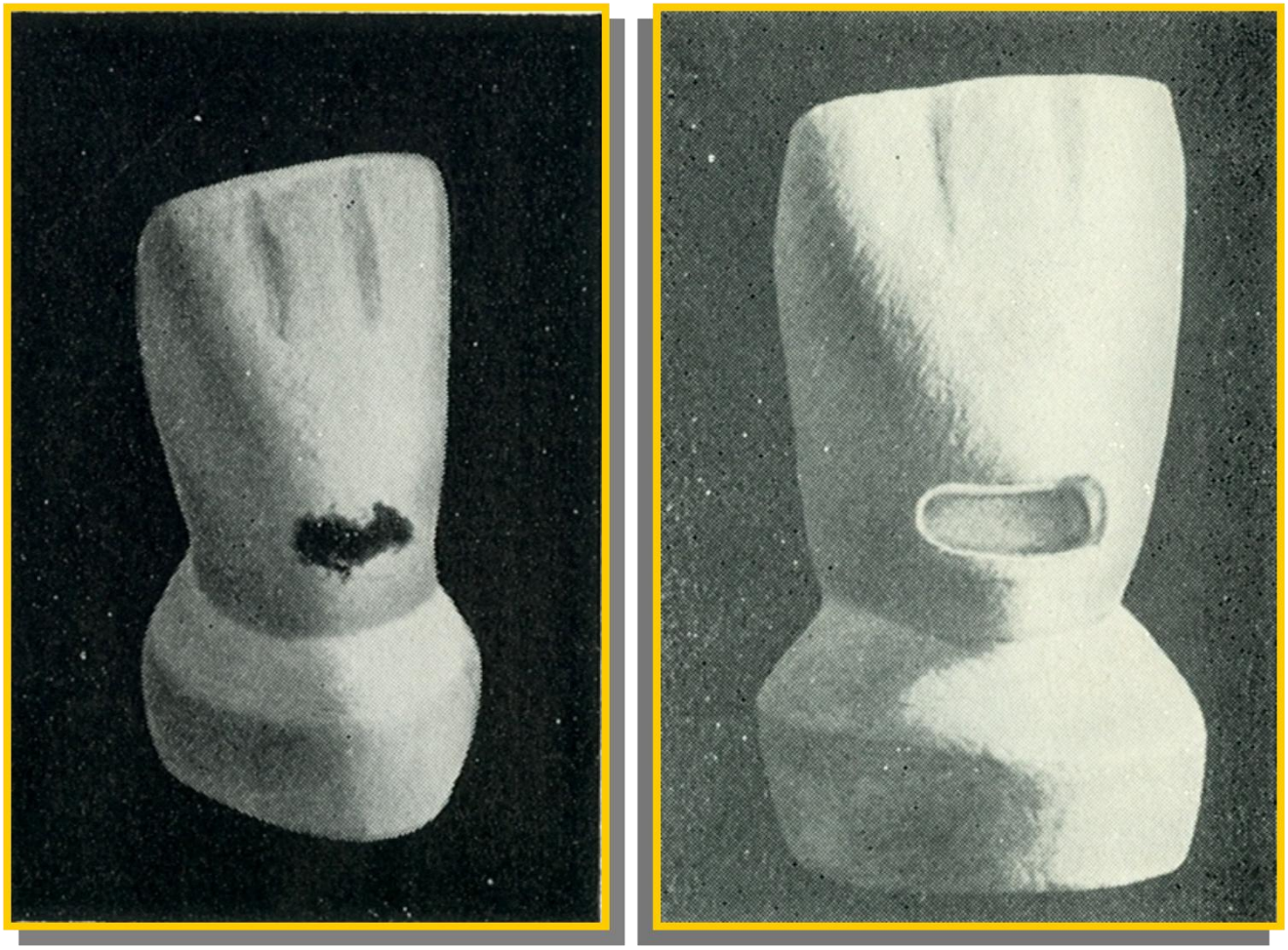
Features of preparation of carious cavities of the 5th class according to Black

Carious cavities of class V usually occur on the vestibular surface in the region of the cervical third of the crown. The lower border of the carious cavity sometimes goes under the gingival margin, the upper one is limited by the equator of the tooth crown.

Given the pronounced pain sensitivity of the cervical region, it is preferable to perform the preparation of class V carious cavities under anesthesia.



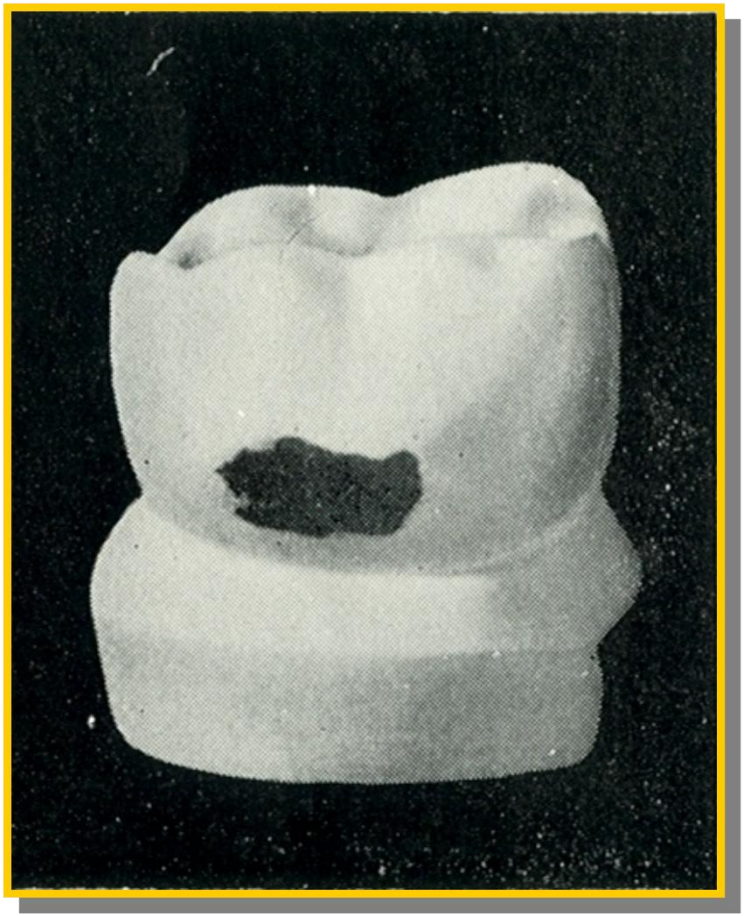
Caries lesion of the cervical area of the frontal tooth



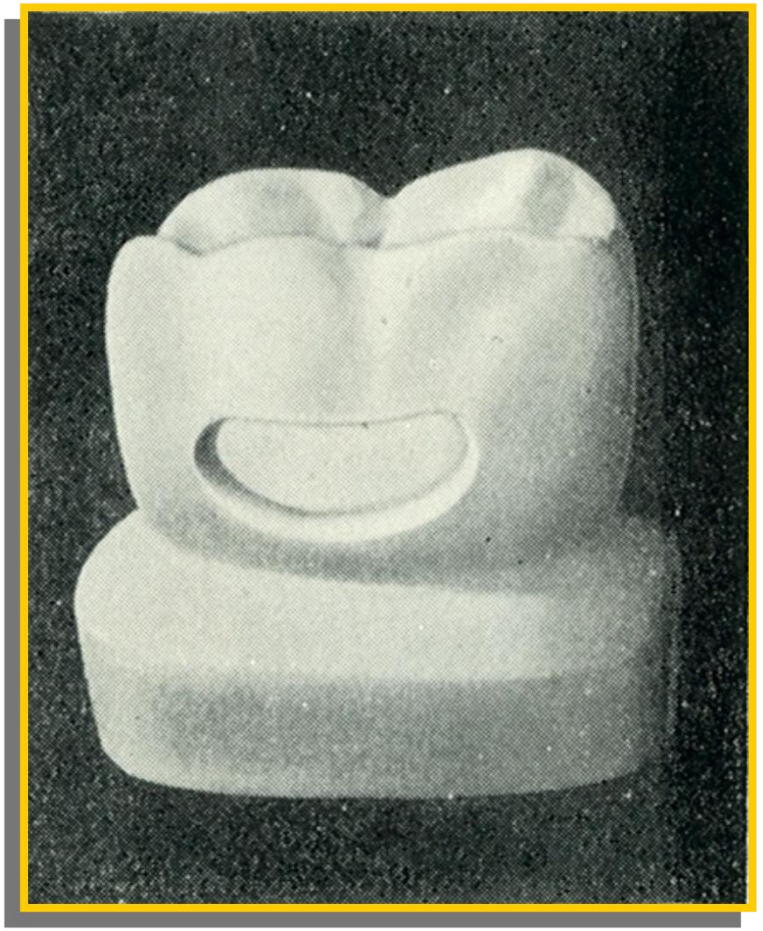
before preparation

after preparation

Caries lesion of the cervical area of the lateral tooth



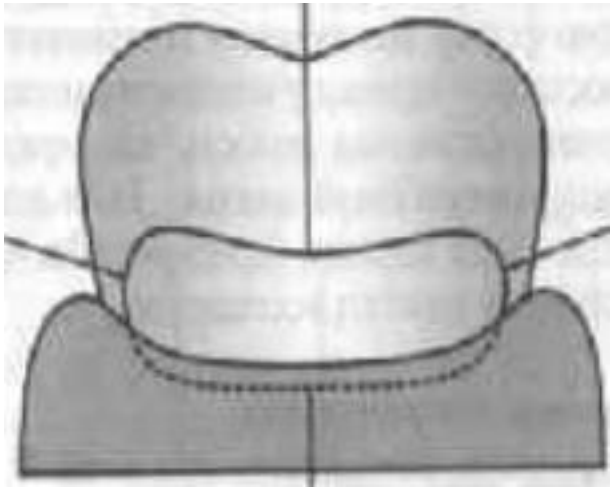
before preparation



after preparation

FEATURES OF PREPARATION CARIOUS CAVITIES OF CLASS V BY BLACK

- **1. Opening of the cavity.**
- **The opening of Class V cavities, as a rule, is not required. This is due to the fact that the defect in this case develops on a smooth, convex surface. Therefore, the focus of the carious lesion in most cases has a crater-like shape, not a pear-shaped one**
- **2. Preventive expansion.**
- **Prophylactic expansion of class V cavities in the "chronic" course of caries, single cavities and compliance with the rules of oral hygiene by the patient is usually not carried out.**



3. NECRECTOMY.

all affected, non-viable tissues are removed. On the front teeth, in order to ensure the aesthetic result of restoration, not only softened, but also all pigmented dentin is removed. Given the proximity of the pulp, necrectomy should be performed with extreme caution.

4. CAVITY FORMATION.

- **preparation of class V cavities, taking into account their small size and the proximity of the pulp, it is better to carry out non-aggressive spherical or pear-shaped drills at low speed using a micromotor tip. The turbine tip should not be used in this situation;**

- **a kidney-shaped form with a gingival wall parallel to the gingival edge is considered optimal for a class V cavity**

- **the bottom of the cavity is formed convex, taking into account the topography of the tooth cavity.**

- **the cavities give a retention shape. This is achieved by creating a convergence of the occlusal and posterior walls, i.e. there should be sharp (up to 45 °), slightly rounded corners between the bottom of the cavity and these walls. The medial and distal walls of the cavity are formed at an angle of 90 ° to the surface of the tooth.**

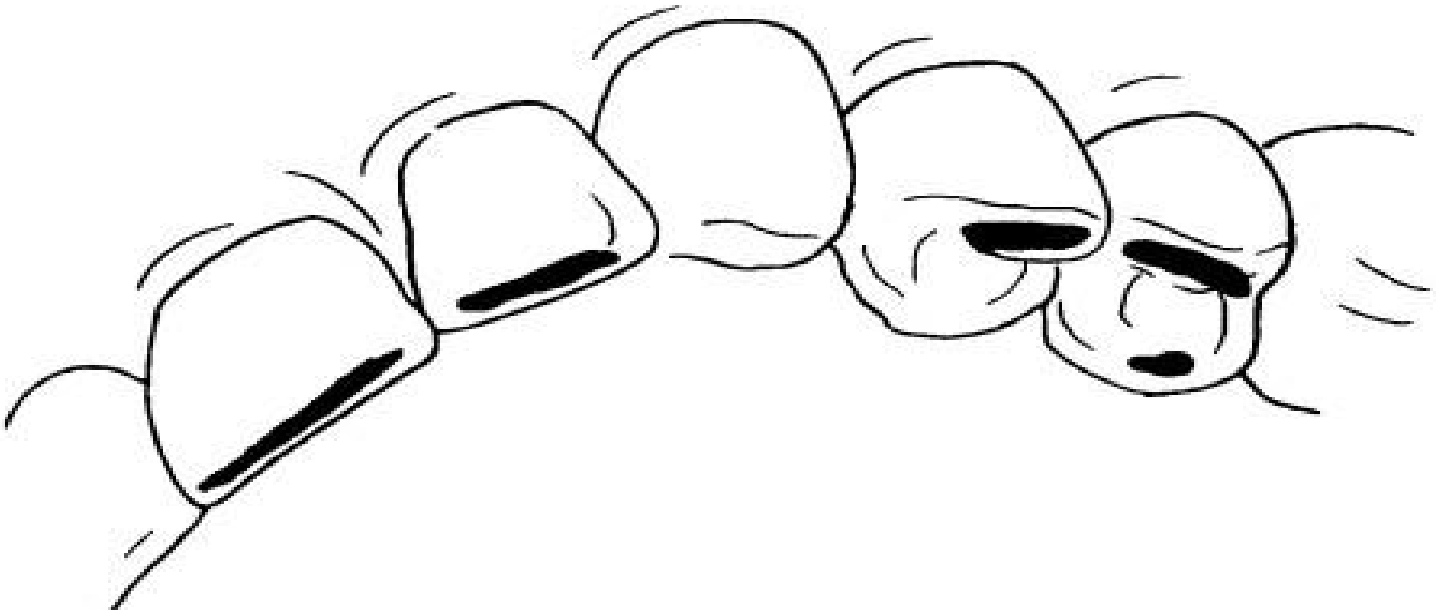
another option is to create retention cuts in the dentine with a small spherical boron on the walls of the cavity at their junction with the bottom.

- **These undercuts have the shape of furrows running along the enamel-dentine border. on the occlusal and posterior walls. Retention furrows are not applied to the medial and distal walls. These walls are formed at an angle of 90° to the tooth surface.**

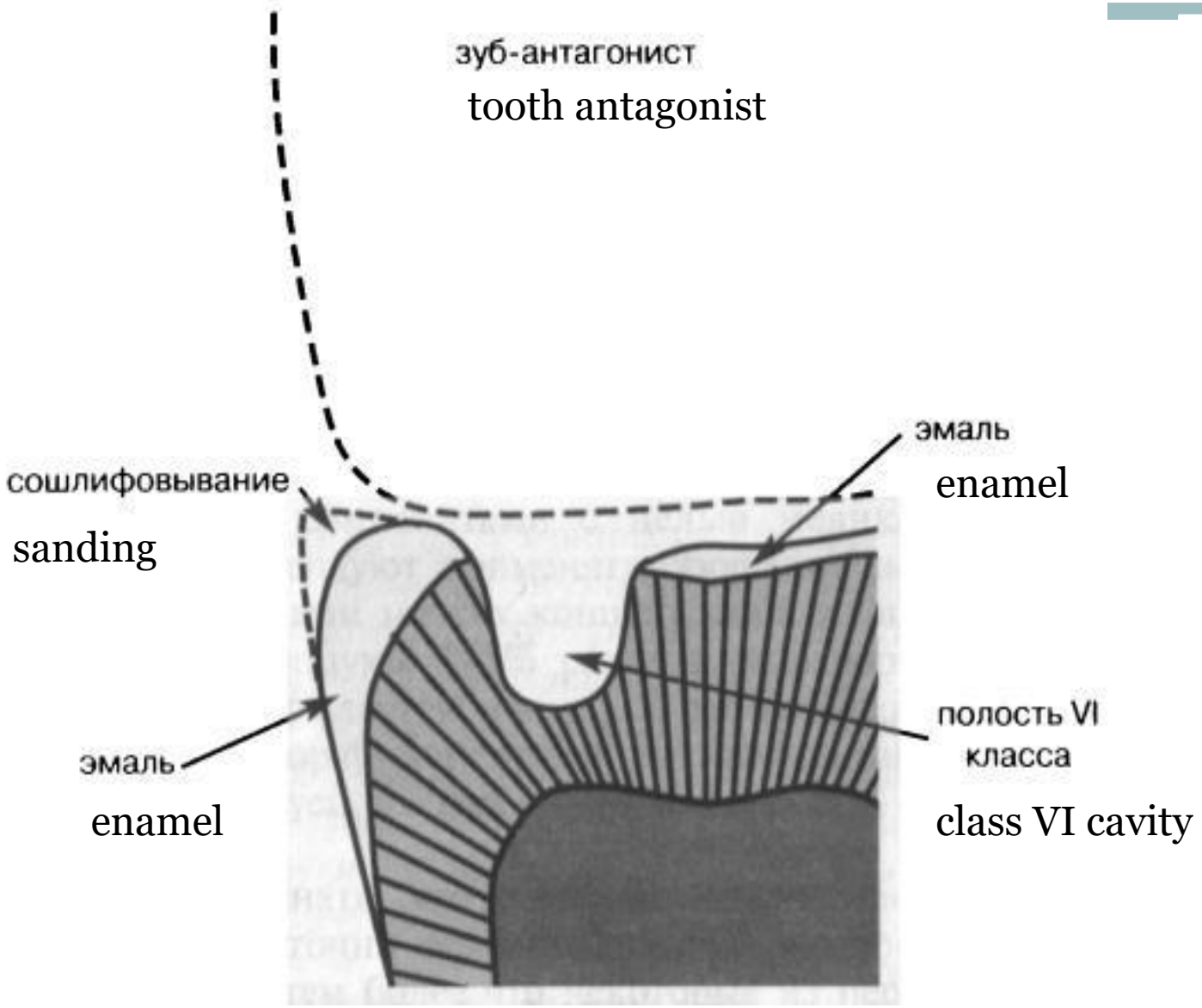
For better fixation of the permanent seal, retention grooves are formed in the walls of the formed cavity with a small wheel-shaped or inverted cone drill.

The walls of the formed cavity in the cervical region are determined solely by the thickness of the dentin due to the absence of enamel. This does not allow the formation of a deep cavity. For these reasons, the bottom of the cavity is made more convex, taking into account the topography of the crown cavity of the tooth.

Carious cavities of class V on the front teeth are treated with straight, and on the molars — angular tips. In the work, fissure, wheel-shaped and reverse-cone drills are used.

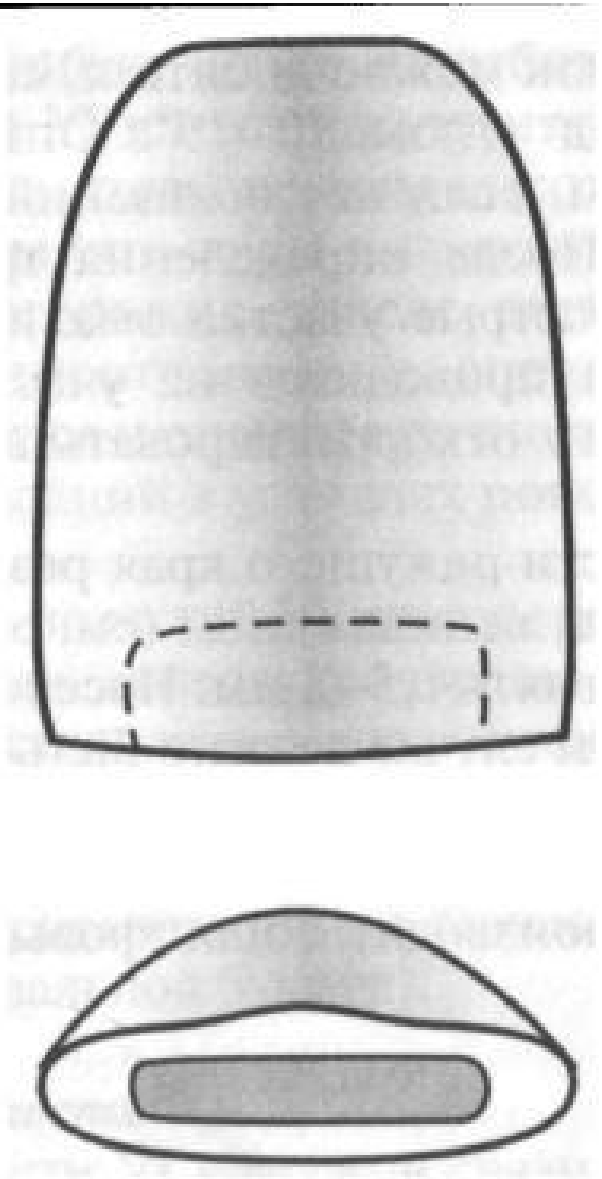


class VI cavity



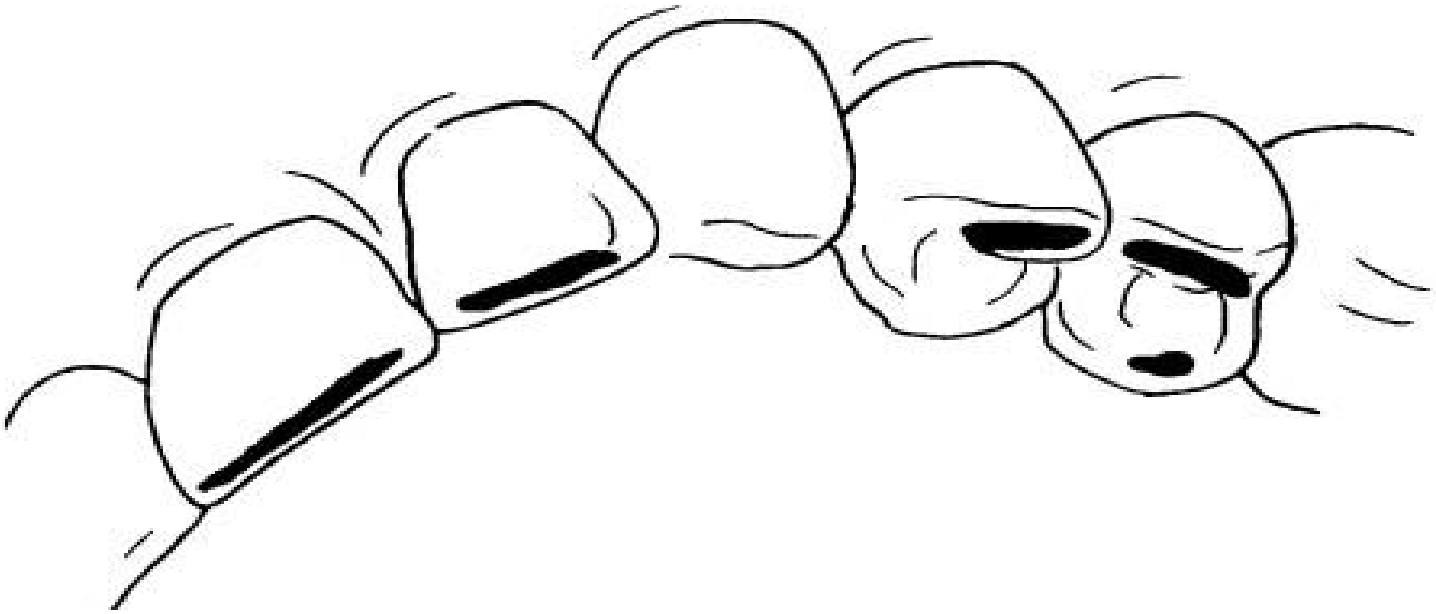
A class VI cavity at the top of the chewing mound

A class VI cavity on the cutting edge of the incisor

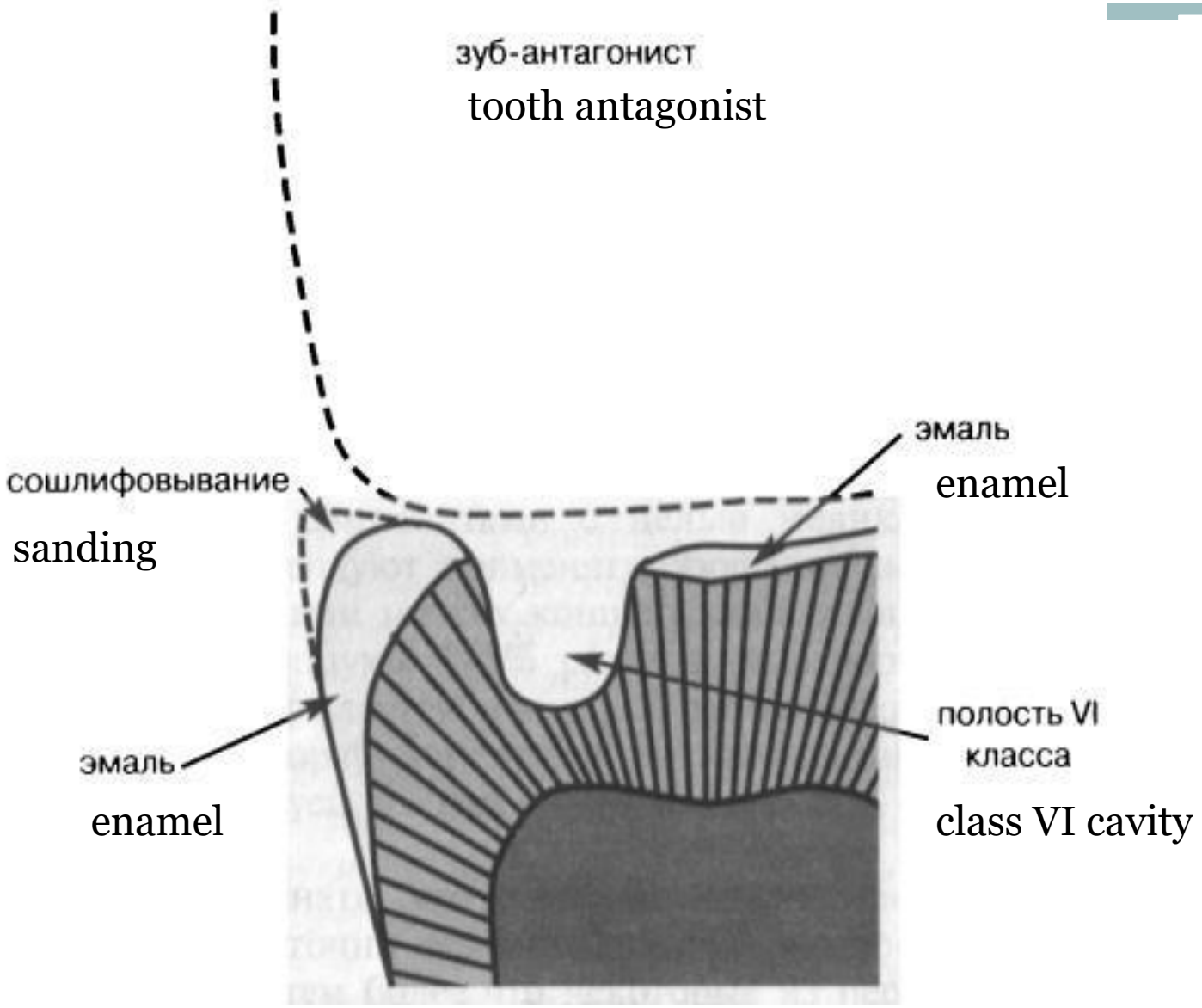


- The cavity in the area of the cutting edge of the cutter is created in the form of a groove with a slightly narrowed bottom. Its depth should also be 1.5-2 mm. Excision of unaffected tooth tissues in this case should be minimal. All enamel edges of the cavity on the incisors strive to preserve. Sometimes, in order to ensure the location of the seal at the level of the edges of the walls of the cavity, the antagonist tooth is sanded.

- The cavity at the top of the hillock is formed of a cylindrical shape with parallel or slightly converging walls to the bottom. The inclination of the walls can be achieved by creating a bevel of enamel along the edges of the cavity at an angle of 10-15 °. The optimal depth of the cavity is 1.5-2 mm, if there are no indications for deeper preparation. After determining the boundaries of the restoration, sharp sections of enamel along the edges of the tooth crown are sanded.



class VI cavity



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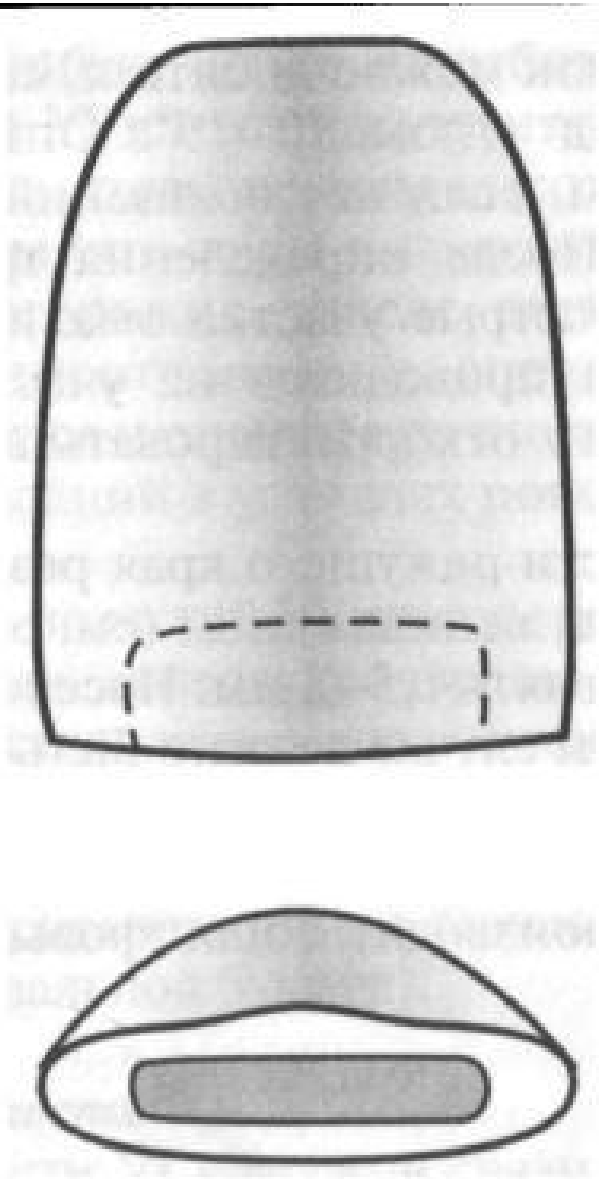

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