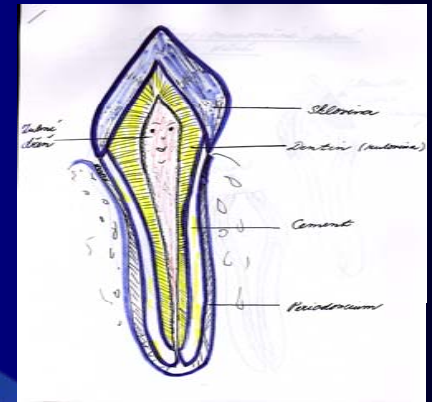


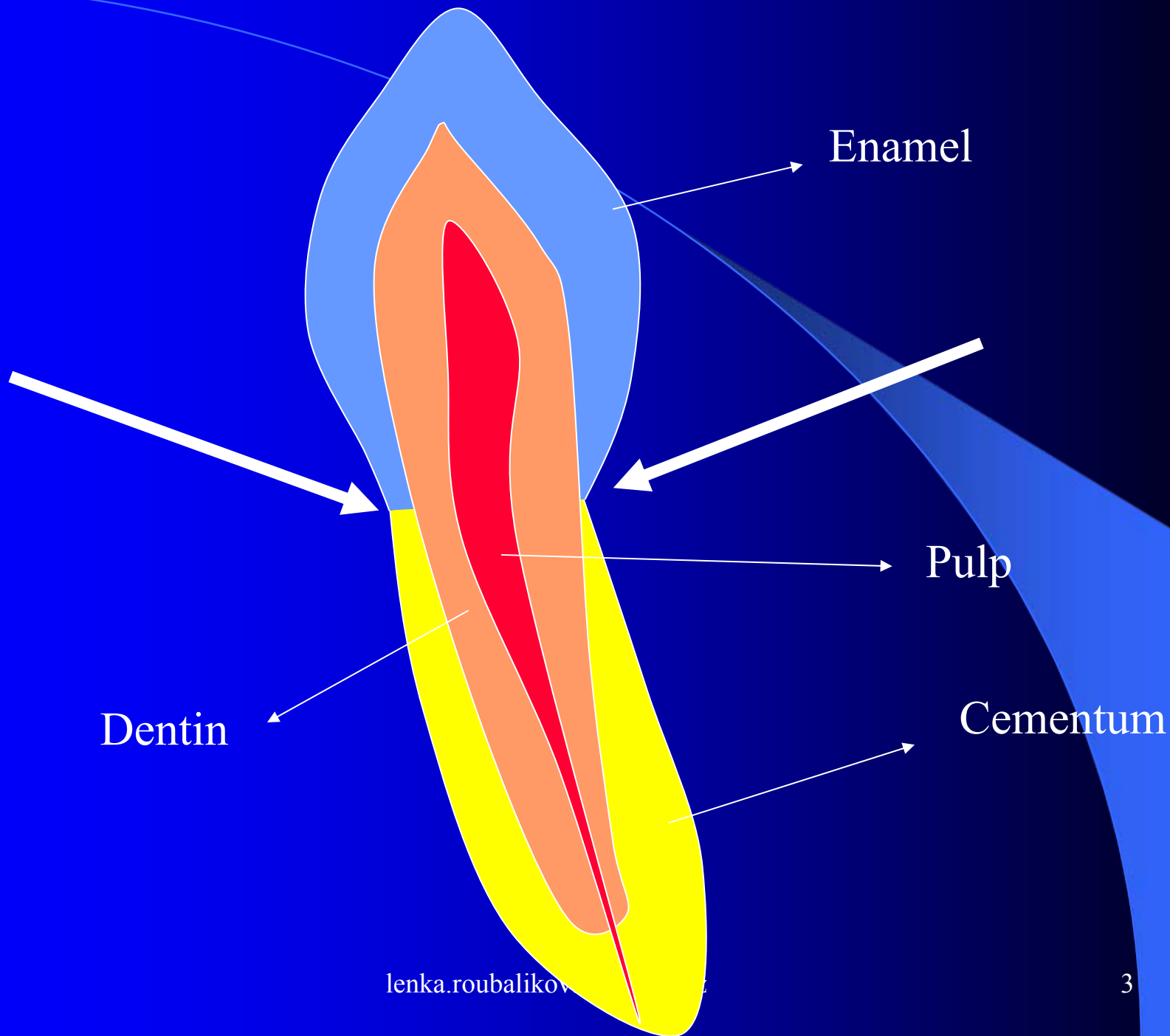
The background is a dark blue gradient. A thin, light blue curved line starts from the top left and curves towards the center. A light blue triangular shape is positioned in the lower right, pointing towards the center. The text "Class V." is centered in the middle of the image.

Class V.

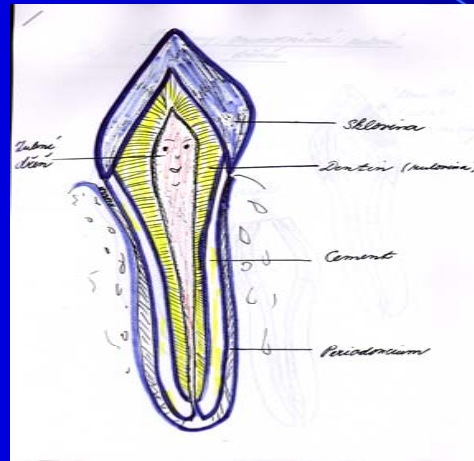
Cervical area



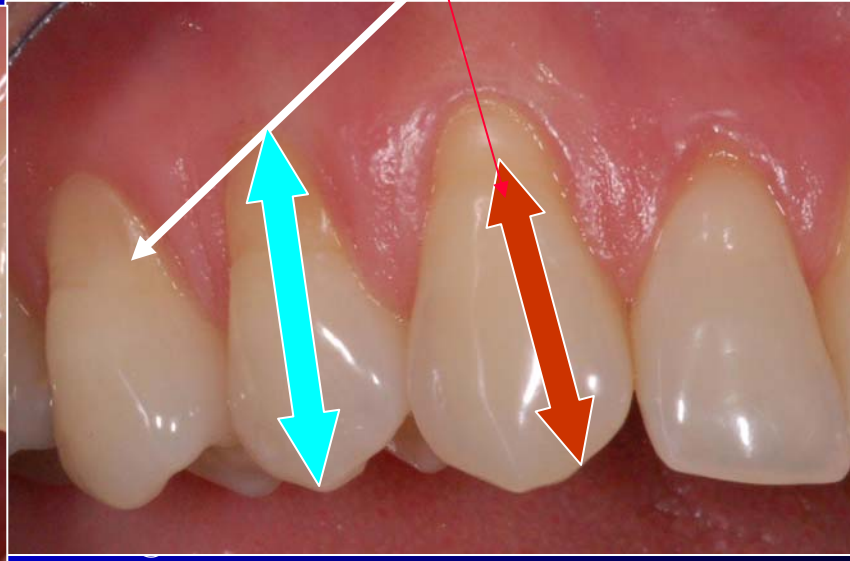
- Caries risk place
- Nearness of the gingival border - possibility of its injury, bleeding, inflammation
- Flow of the sulcular liquid
- Specific ordering of the hard dental tissues
- Difficulties with the maintenance of dry operation field
- The pulp chamber can be opened easily

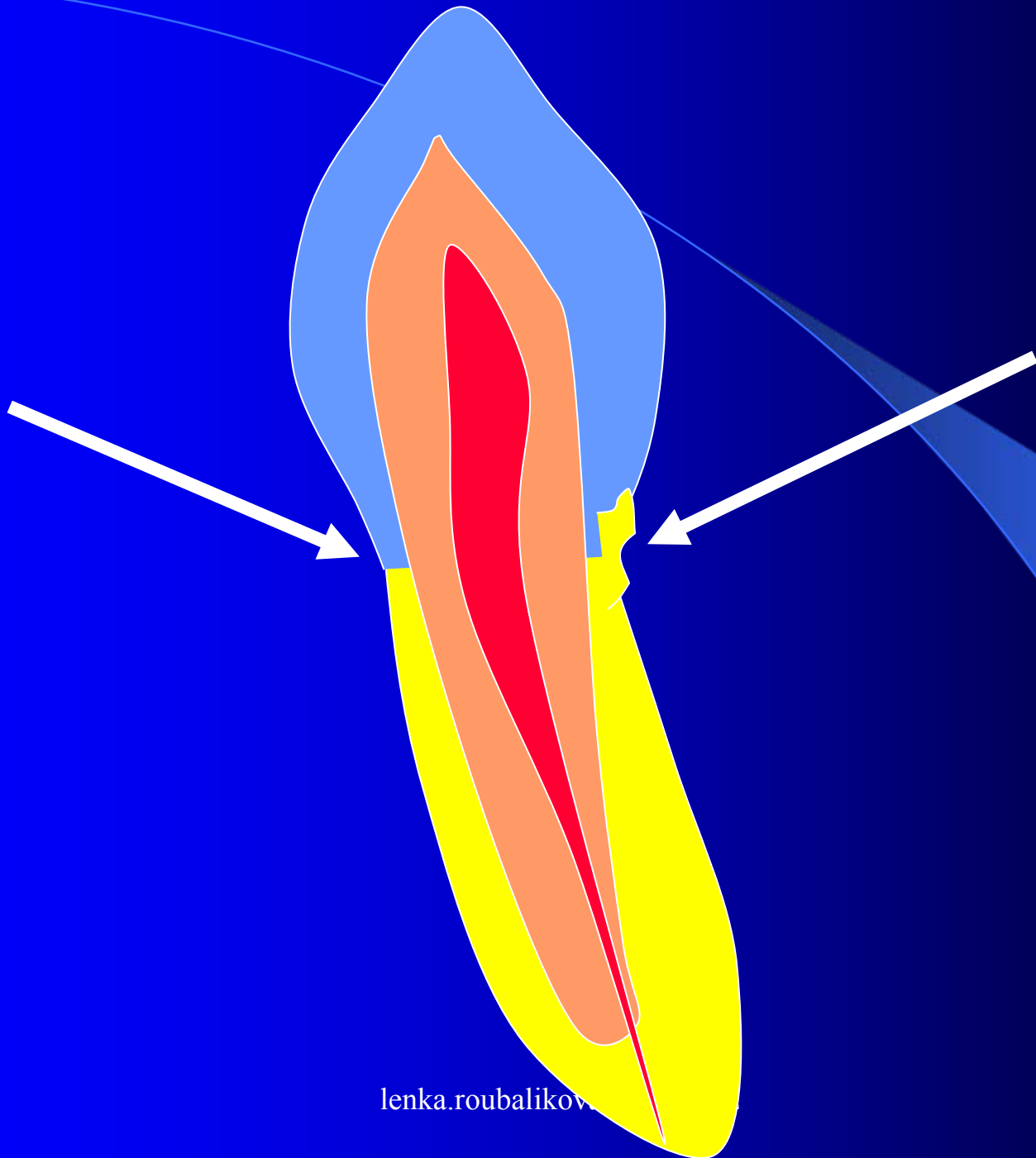


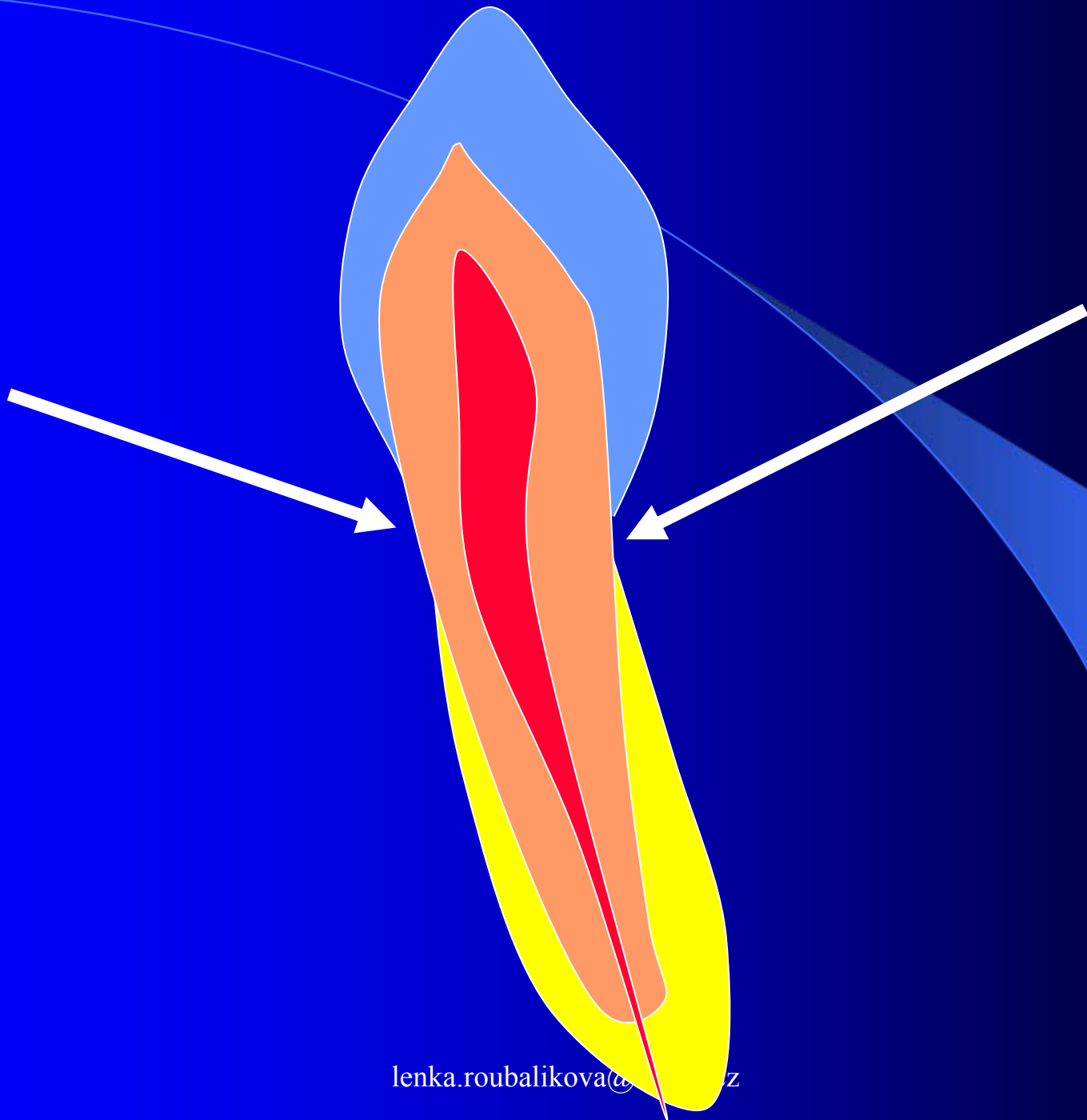
Anatomical x clinical crown



DEJ



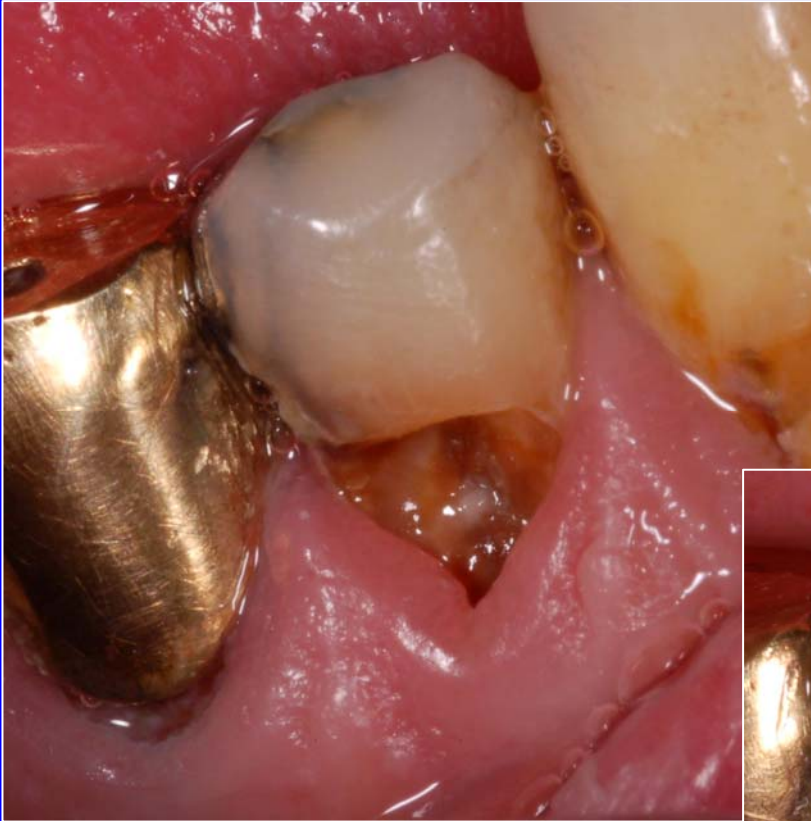






Access

- Elimination of the undermined enamel
- Burs or diamonds (pear), tapered fissure bur
- Separation of the gingiva–temporary filling
guttapercha, fermit, clip, zinkoxidsulphateate
cement, cavit, provimat).
- Ablation of ingrowing gingiva–surgical(scalpel,
laser, highfrequencycurrent)



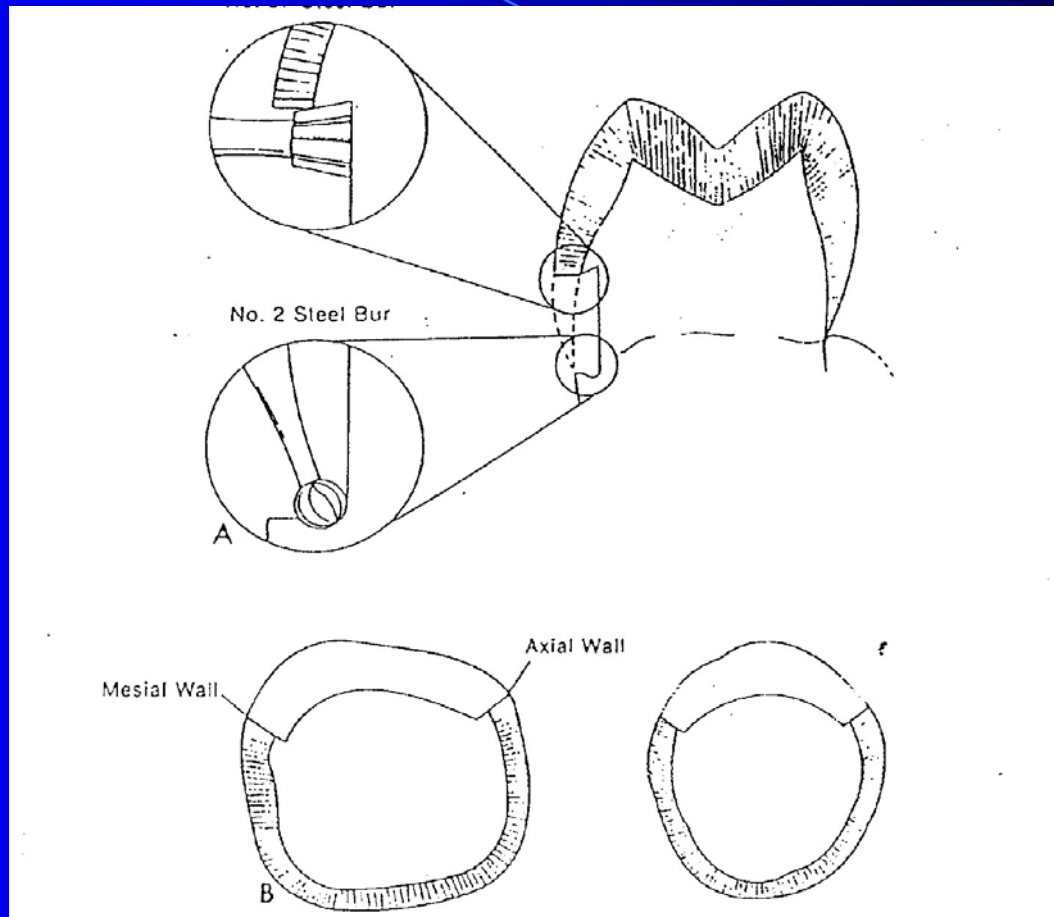
Class V. - amalgam

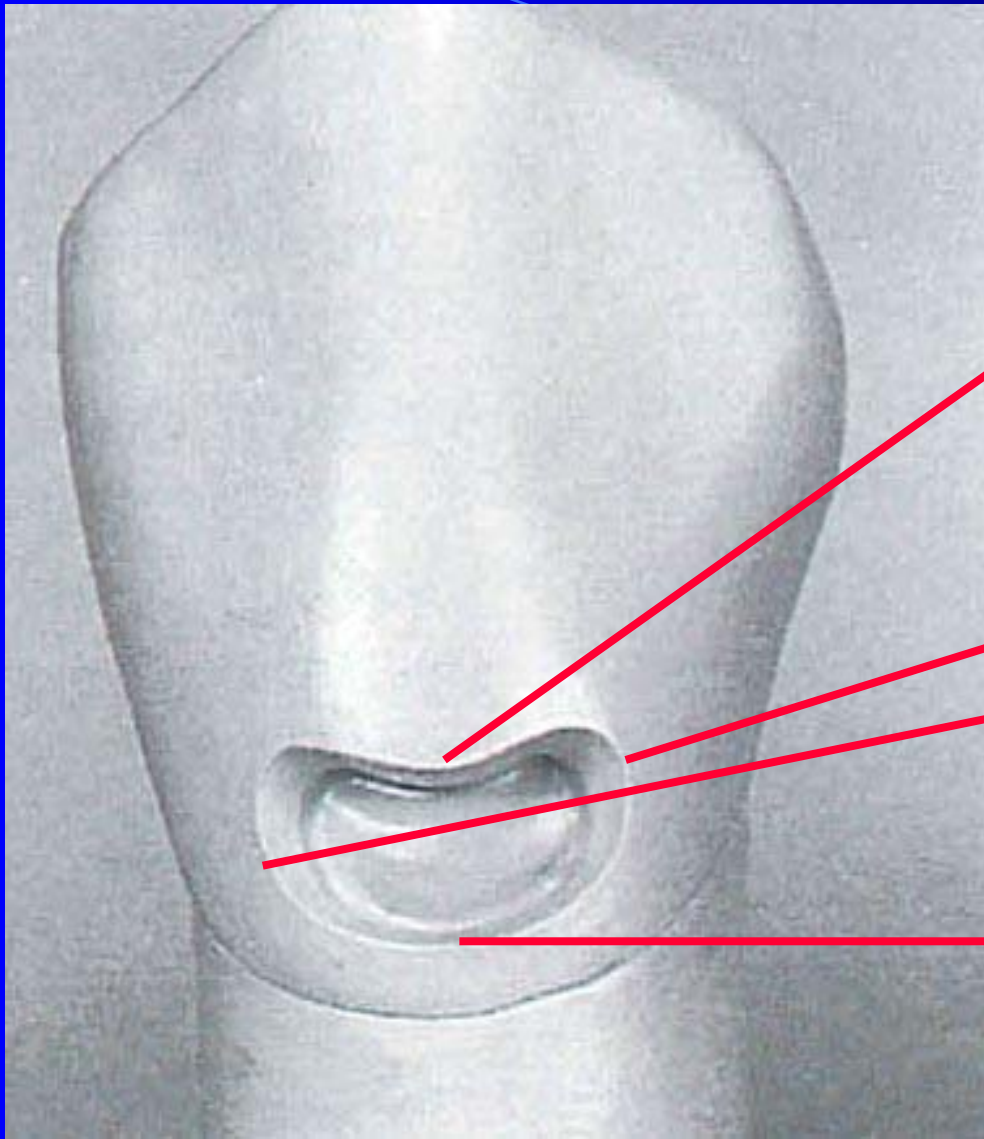
- Posterior area



Outlines

- We do not follow the Black's rules exactly!
- Gingival: axial depth of 0,5 mm inside the DEJ (subgingival)
- Extention of the preparation incisally,
- gingivally, mesially and distally - see the following picture.
- Total depth: 1 –1.25 mm. If on root surface only - 0,75 mm





Occlusal

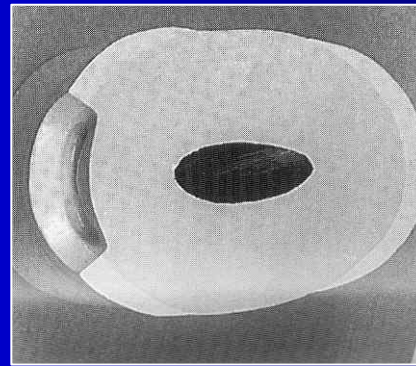
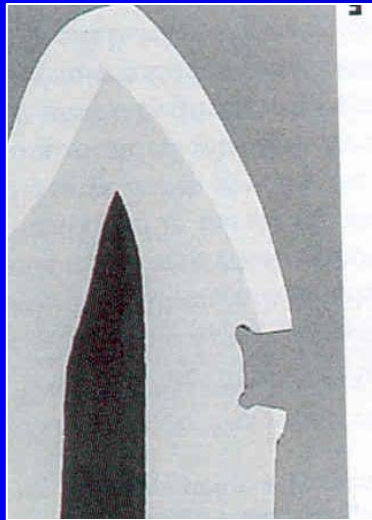
Mesial
and distal
border

Gingival border



Retention

- Box with undercuts cca 0,75 – 1,25 mm deep



Resistance

There is no direct loading with bite forces



Excavation of carious dentin

- Round bur
- Excavator

Finishing

- Smooth borders, enamel must be supported with dentin

Filling

- Portion of amalgam are condensed using a condensor(stamen) and finished using a spatula or a carver

Class V. composite Indications

Aesthetic reasons



Class V. composit

Contraindications

- Dry operations field cannot be kept
- Subgingival margins
- Poor oral hygiene
- Root caries



Access

- Elimination of the undermined enamel
 - Burs ordiamonds(pear), tapered fissure bur
- Separation of the gingiva–temporary filling
guttapercha, fermit, clip, zinkoxidsulhate cement, cavit, provimat).
- Ablation of ingrown gingiva–surgical(scalpel, laser, highfrequencycurrent)
- Composite must not be put subgingival!!!!

Outlines

- Cavity is limited on the caries defect only—no extension!!!!
- The depth usually 1 mm

Retention

- Retentive border: 1 – 2 mm wide, bevel 45°.
- Acid etching (phosphoric acid) – 20 s enamel, 10 s dentin
- Priming, bonding

Resistance

There is no direct loading with bite forces

Excavation of carious dentin

- Round bur
- Excavator

Finishing

- Retentive border: -removing of the aprismatic enamel



Better conditions for retention

Better aesthetics

Class V. glass ionomer cement

- Cavity outside of enamel



Class V. glass ionomer cement

- Benefits
 - Chemical bonding
 - Release F⁻
 - Favorable thermal expansion (similar to dentin)
 - Acceptable aesthetics

Outlines

- Cavity is limited on the caries defect only—no extention!!!!
- The depth usually 1 mm

Retention

- Box - mechanical
- Chemical – the cavity must be treated with the conditioner (25% acrylic acid, 20 s, wash afterwards)

Resistance

There is no direct loading with bite forces

Finishing

- Fine diamond bur – smooth borders

Sequences of operations

- Conditioner 20 s
- Washing off 20s
- Wet cavity
- Filling material
- Matrix
- Varnish

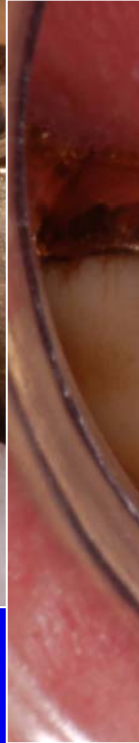
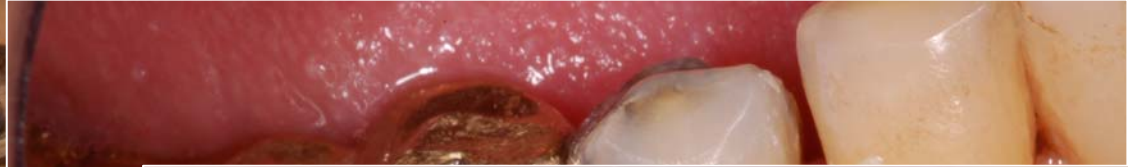
Matrices

Important for the correct shape of fillings

For good curing of materials

Strip or a special form



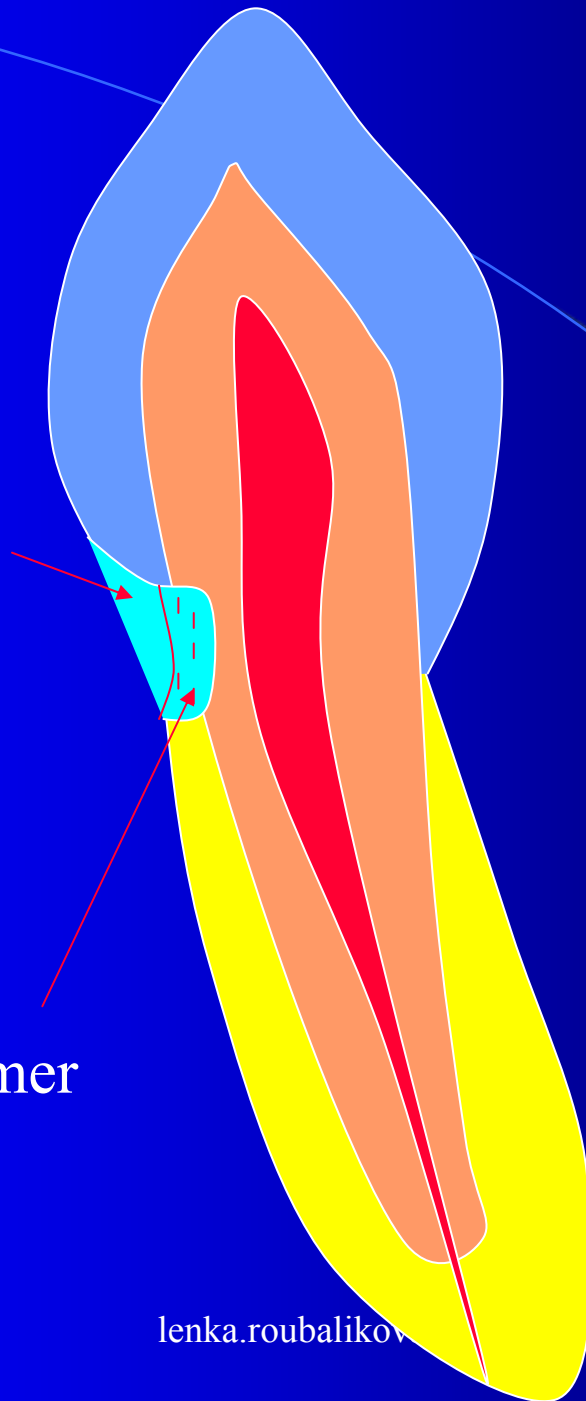


Class V. – Sandwich principle (combination of GIC and composite)

- Base of glassionomer– a replace of the lost dentin
- Thin layer of composite–a replace of the lost enamel

Composite

base of a glasionomer



Bond:

GIC -tooth
chemical

Composite-tooth
micromechanical

Composite-GIC
micromechanical

