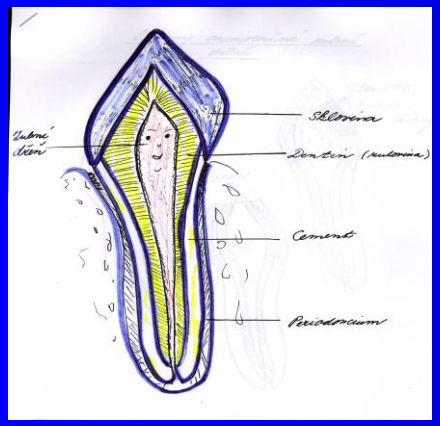
Class V.

Characteristic

- Cervical defects
- - carious
- - non carious lesions



Anatomical x Clinical crown

Anatomical x clinical crown

- Anatomical crown
- - cementum- enamel junction
- Clinical crown – gingival border

anatomical x clinical crown

Anatomical crown
The border is cemento-enamel junction

Clinical crown
The border is gingival border

Cervical area

- Caries danger area
- Gingiva - possibility of its injury, bleeding, inflammation
- Flow of the sulcular liquid

→ Difficulties with the maintenance of the dry field

- Specific ordering of the hard dental tissues

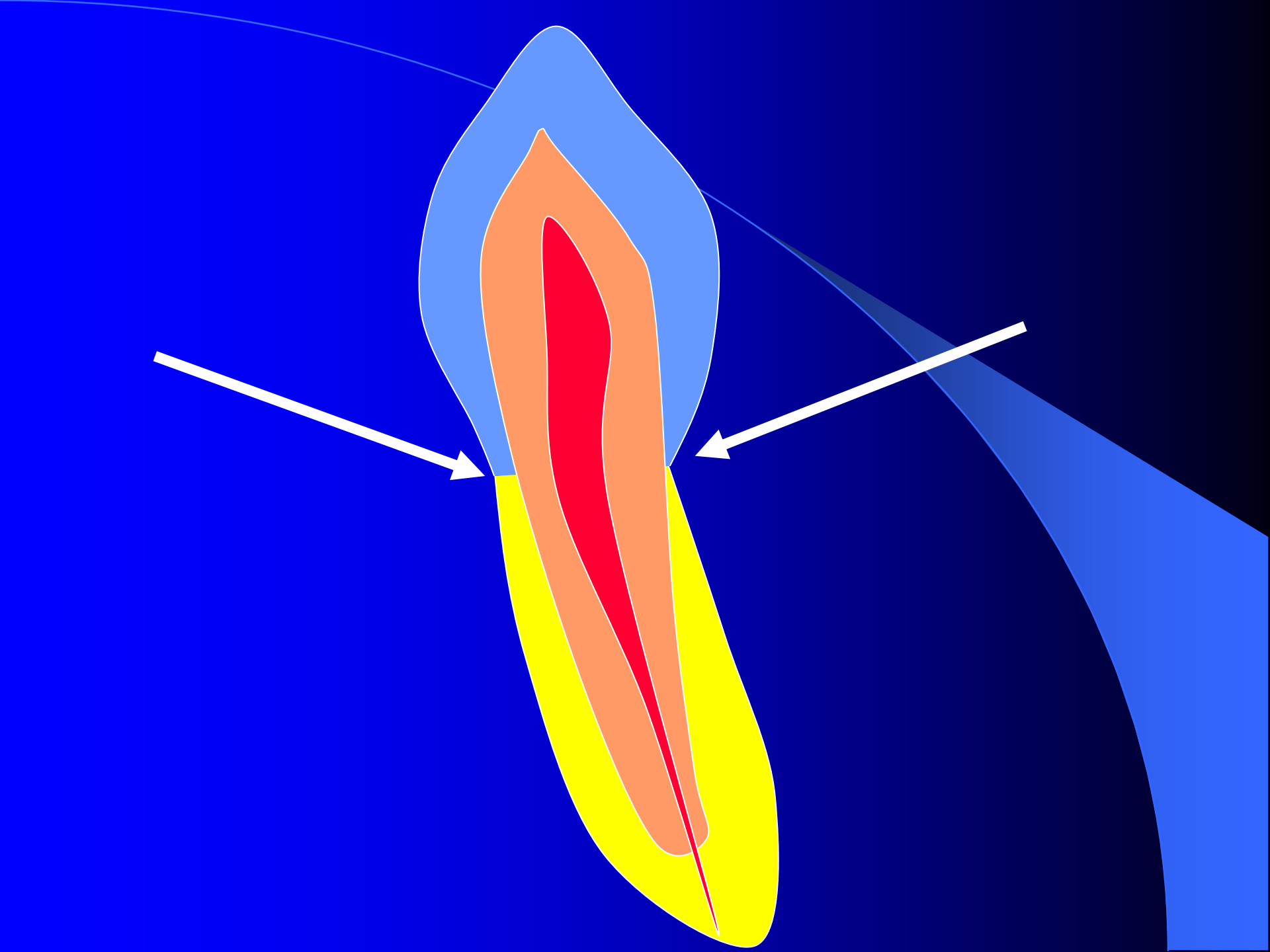
→ Take in account

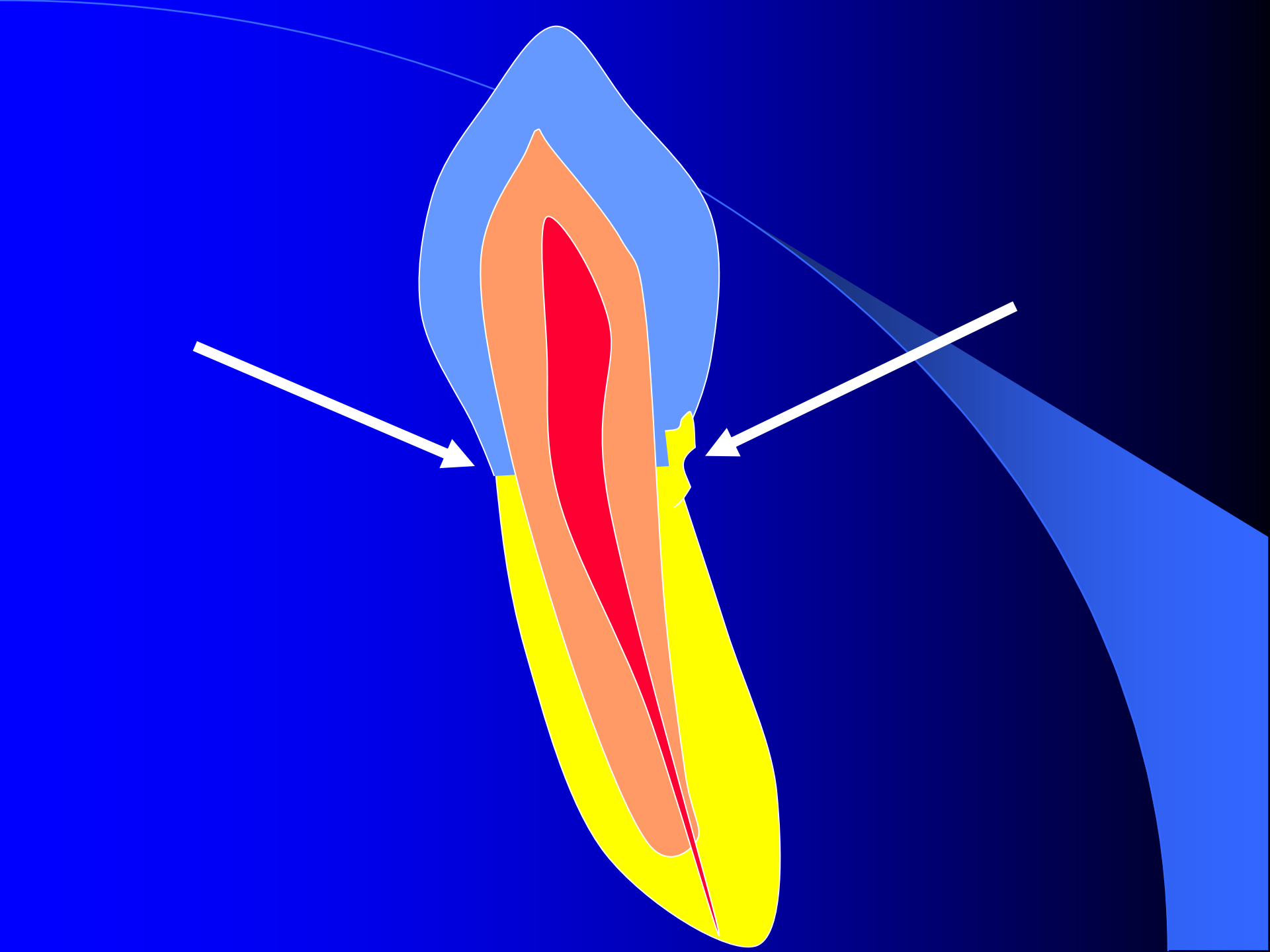
Hard dental tissues in cervical area

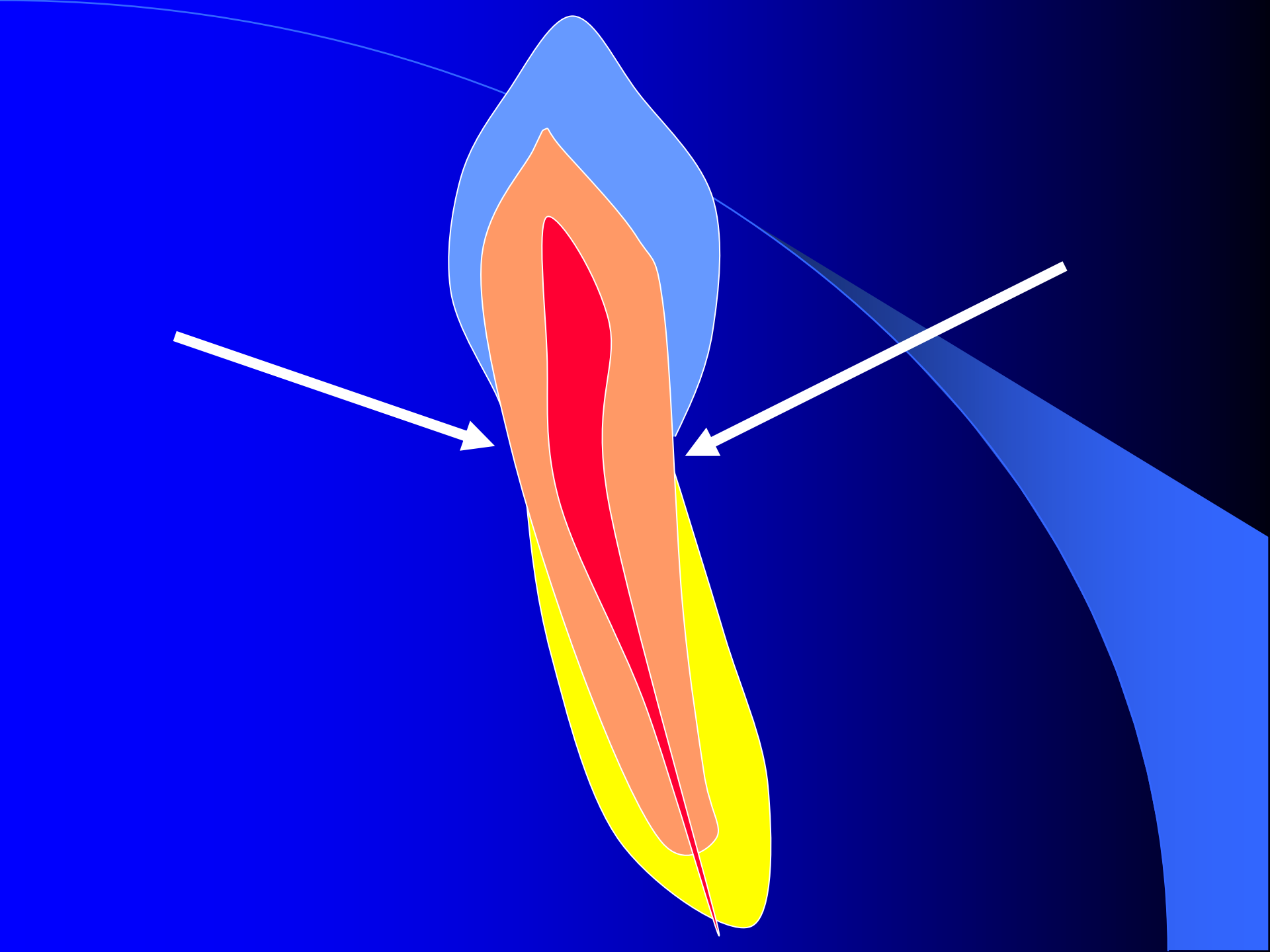
On the surface can be

Enamel
Cementum
Dentin

Risk of opening of
the pulp chamber







Access to the cavity

- Elimination od the undermined enamel
- Burs or diamonds (pear), inverted cone bur
- Separation of the gingiva– temporary filling
- Ablation of ingrown gingiva – surgically

V.Class Amalgam

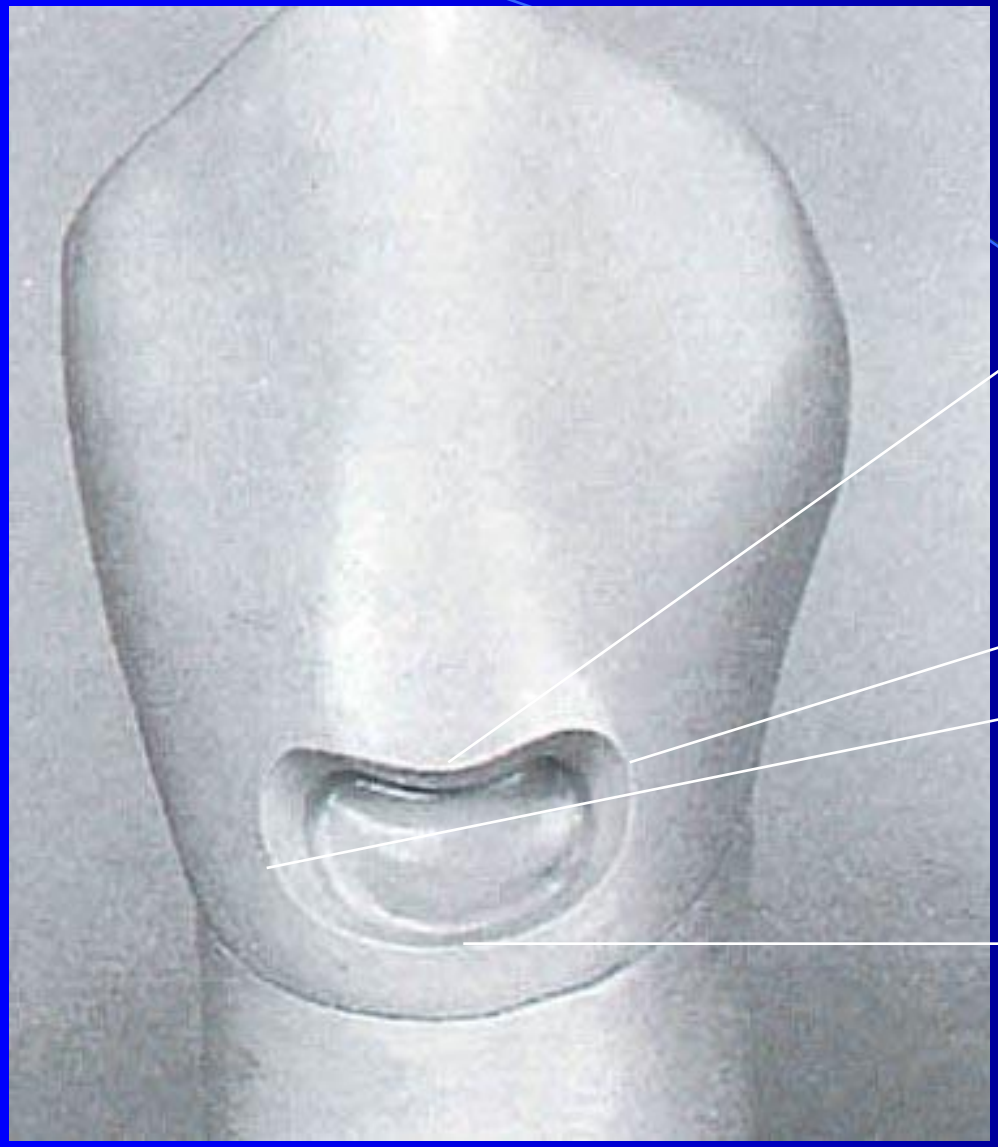
- Posterior area

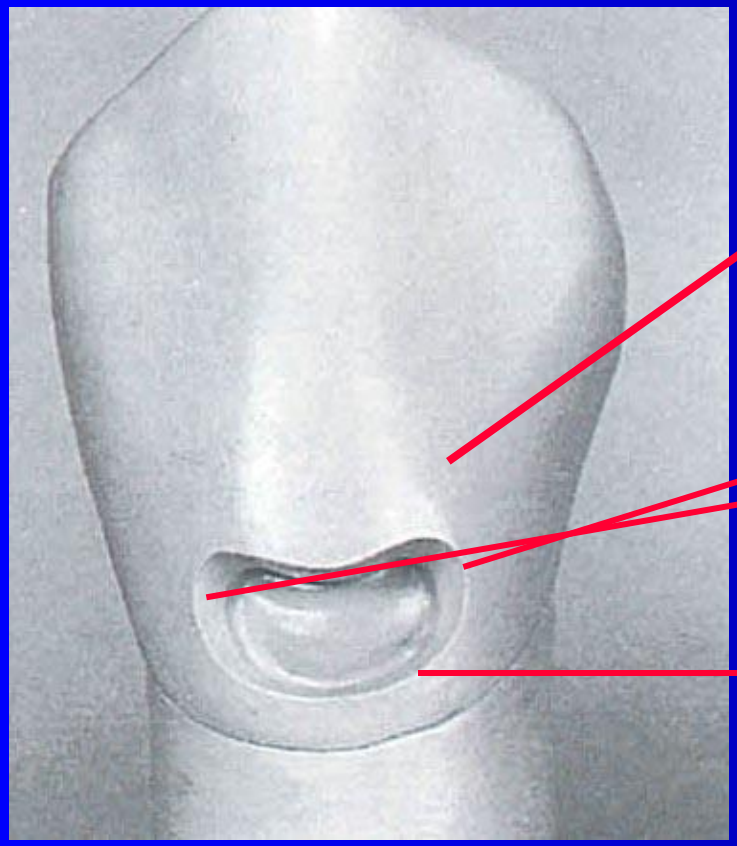
Cavosurface margin

We do not follow Black´s rules exactly!

Gingival: axial dephth of 0,5 mm inside the DEJ.

Extention of the preparation incisally, gingivally, mesially and distally untill the cavosurface margins are positioned in sound dental structure. Total dephth: 1 – 1.25 mm. If on root surface -0,75 mm


Incisal border
Mesial
snd distal
border
Gingival border



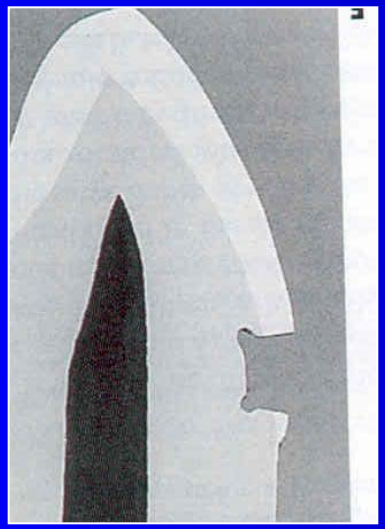
Occlusal margin Below the max. convexity

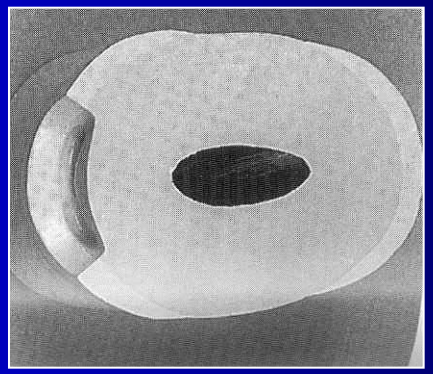
Mesial and distal borders – axial walls

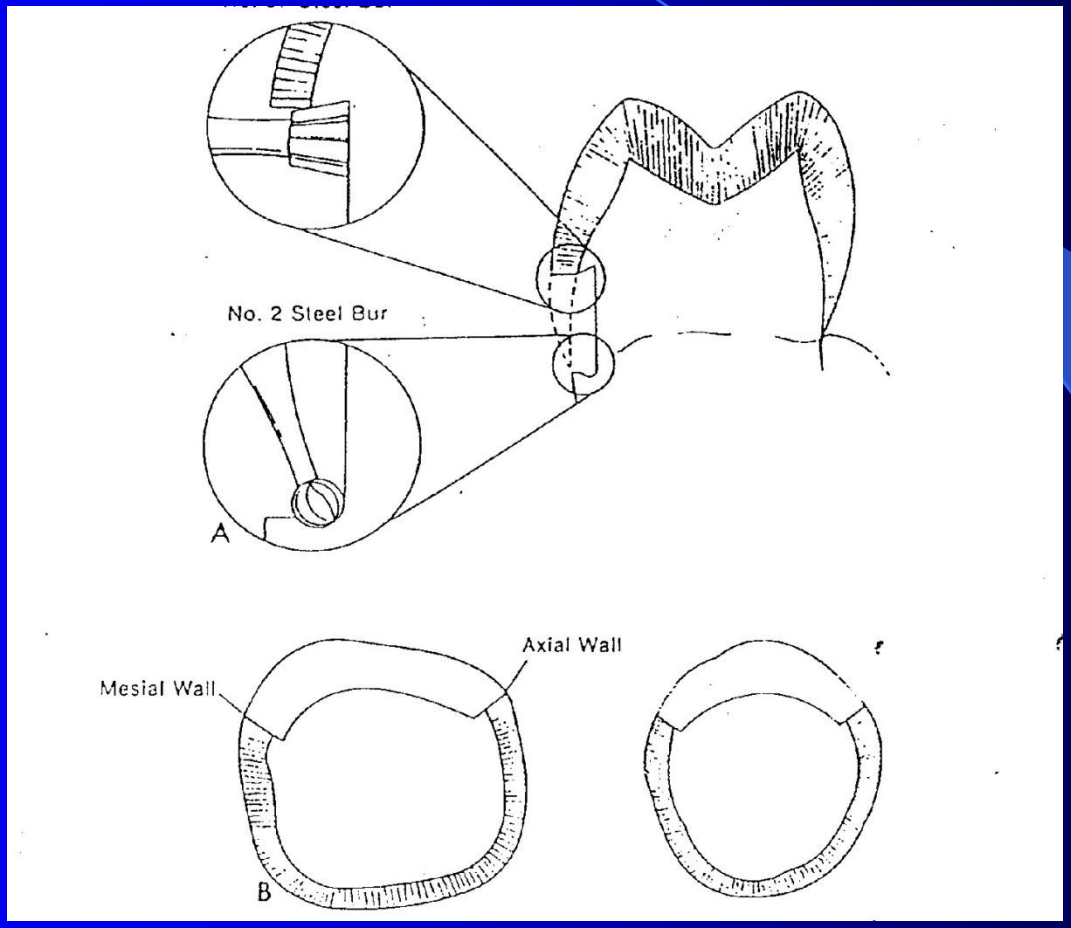
Gingival border below the gingiva 0,5 mm

Retention

- Box 0,75 – 1,25 mm deep, undercuts,






No. 2 Steel Bur
A
Axial Wall
Mesial Wall
B

Excavation of carious dentin

Round bur

Excavator

Finishing of cavity margin

- Fine diamond

Filling

- Portion of amalgam are condensed using a condensor and finished using a spatula or a carver.

Class V.
Composïte

- Aesthetic reasons

It is necessary: good oral hygiene

margin mostly in enamel

Contraindication of composites

- Bad oral hygiene
- Subgingival cavities
- Root caries (outside of enamel)

Access to the cavity

- Elimination od the undermined enamel
- Burs or diamonds

- Separation of the gingiva– temporary filling

- Ablation of ingrown gingiva – surgically

Cavosurface margin

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

The gingival wall must not be subgingivally.

Retention

- Micromechanical retention

Enamel: bevel - the angle 45°

Prepare the retentive border (shallow groove)

Cementum: only finishing with the fine diamond bur.

Retention

Bevel and retentive border (shallow groove):

- removing of the aprismatic enamel

– better condition for micromechanical retention

- better aesthetics

Retention

Acid etching (phosphoric acid): 10 s dentin, 30 s enamel

Washing 30s
Priming,
Bonding
Light curing 10 – 20 s.

Filling

Spatula

Matrix

- Polyester strip, wooden wedges
- Special cervical matrix

Matrix

Transparent cervical matrix

Belvedere matrix

Class V. Glassionomer

cavities that are not

Situated in enamel

anterior as well

as posterior area

Properties

- Chemical fixation to tooth structure
- Fluoride release
- Favorable thermal expansion
- Aceptable aesthetics

Determination of cavity borders

Cavity is limited on the caries defect only – no extention!!!!

The depth usually 1 mm

Retention

- Box
- Chemical

Finishing of cavity margin

Fine diamond bur

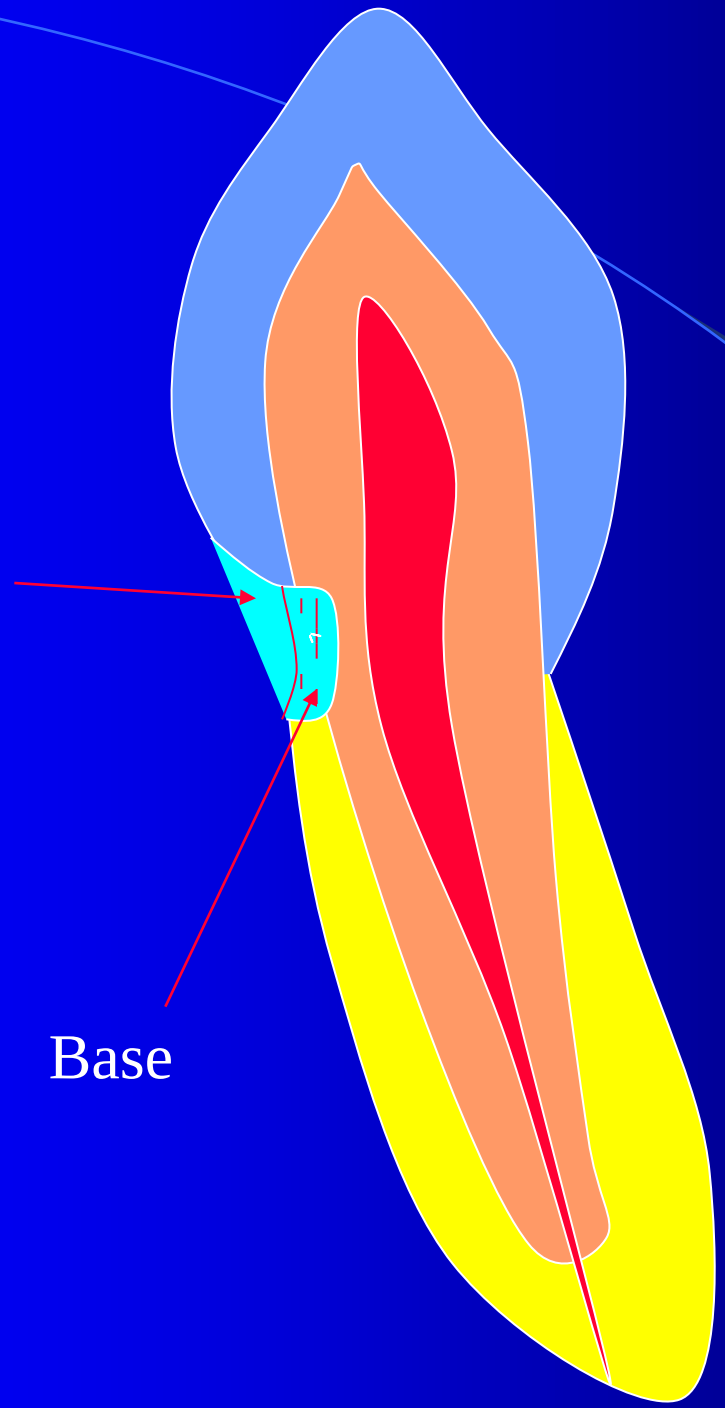
Filling

- Conditioner (based on polyacrylic acid 20 s)
- Washing off
- Wet cavity
- Filling material placed in one bulk
- Matrix
- Varnish

Class V.
Sandwich filling

Base is made of galsionomer – replaces of the lost dentin

Thin layer of composite – replaces the lost enamel



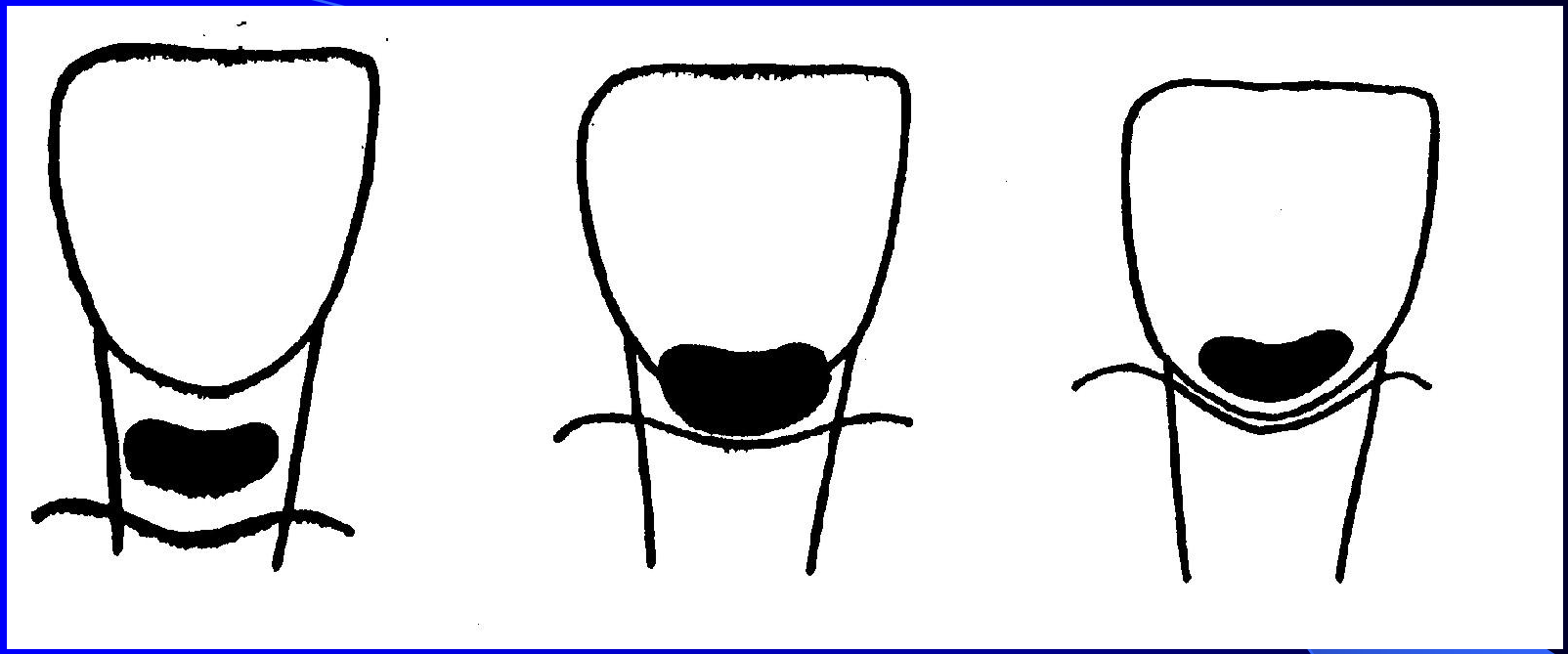
Composite

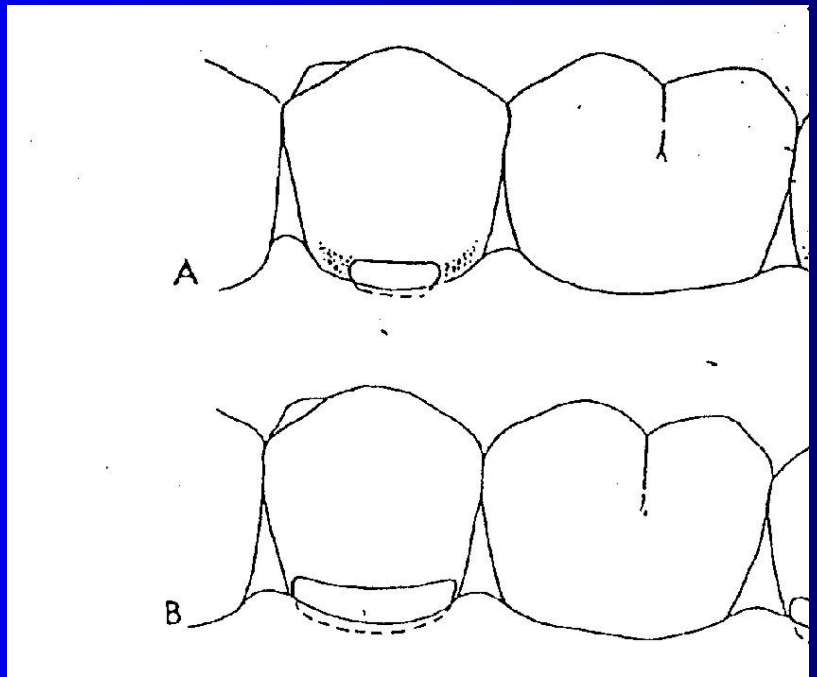
Base

Bond:
GIC - Tooth
Chemical

Composite – Tooth
Micromechanical

Composite - GIC
Micromechanical




A
B