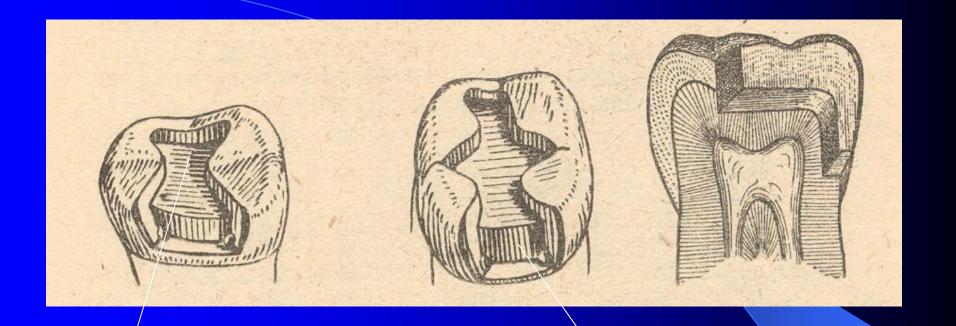
# Class II. – modifications for amalgam

Conventional preparation

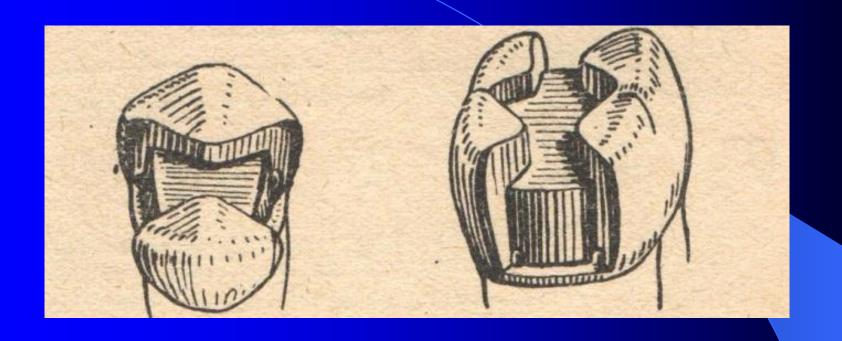
Slot

 Large cavities – replacement of the cusp (cusps), combination with the cavity on vestibular/oral surface

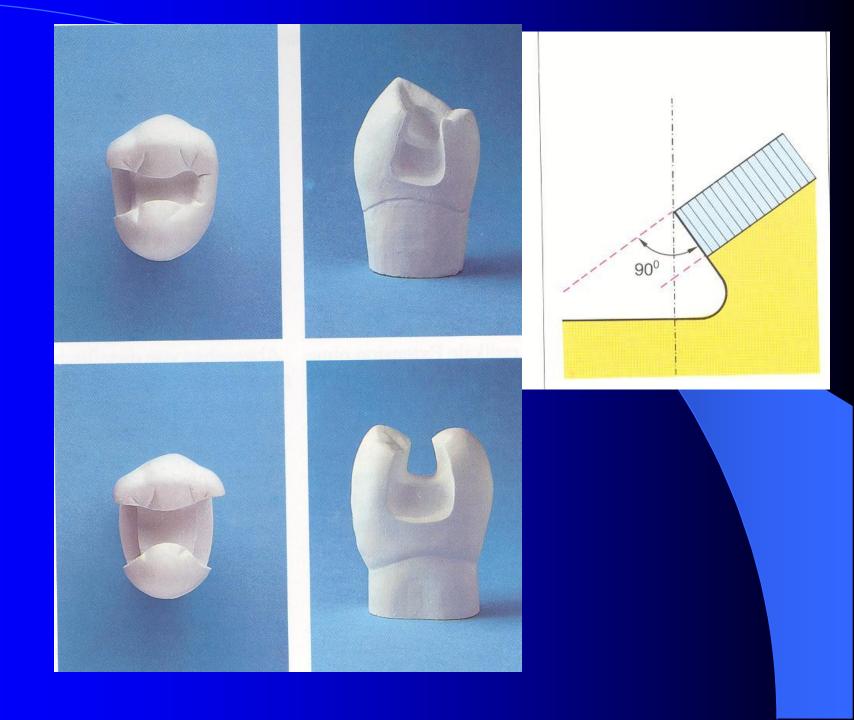


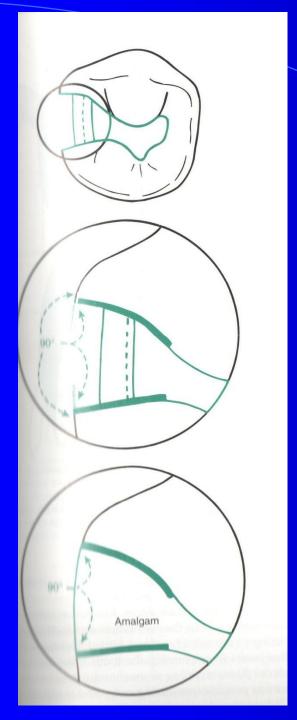
Occlusal cavity

Proximal cavity



#### MOD

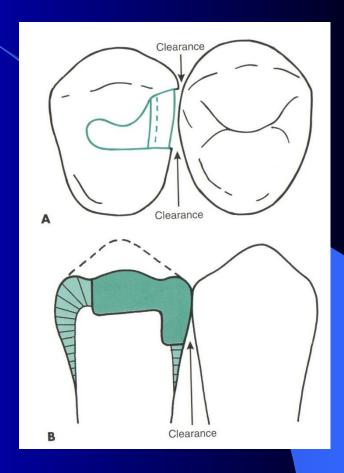


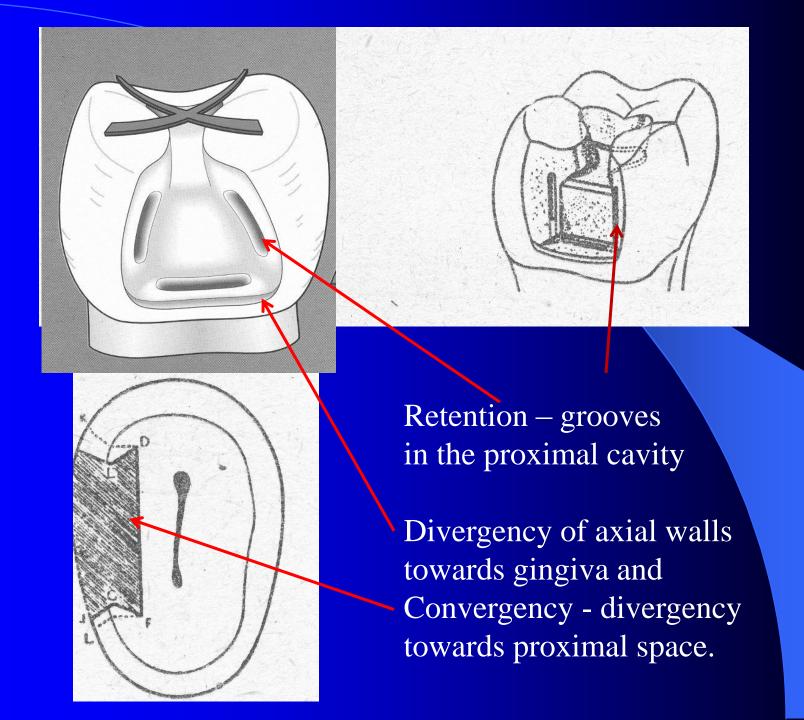


Cavosurface angle

Slight reveres curve

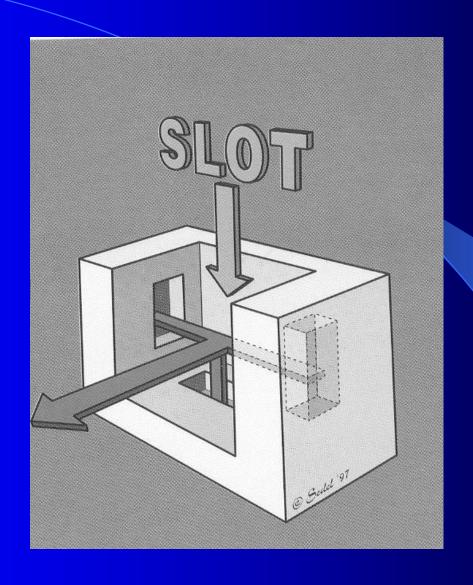
Clearence of the proximal surface







Autoretention



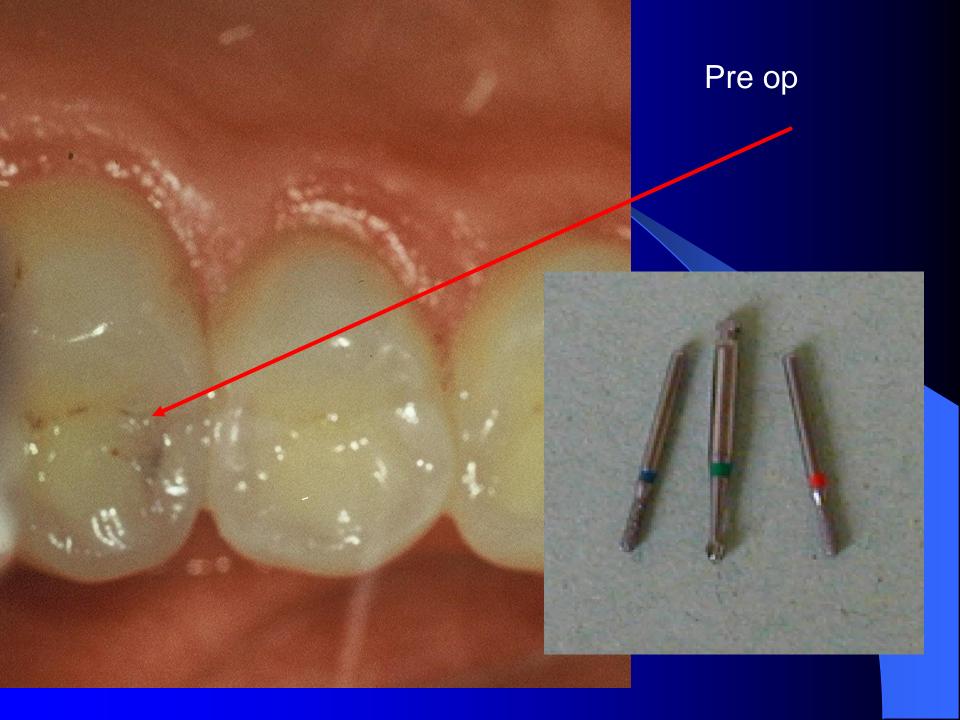
#### Slot preparation

Slot is a cavity that is open on occlusal surface.
It is limited on the proximal ridge



## Slot for amalgam

- Access to the caries lesion
- through the enamel wall
- breaking out of the enamel lamella
- excavation of carious dentin







Access to the cavity

# Slot for amalgam

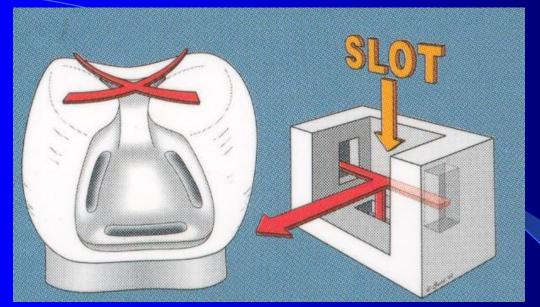
#### **Autoretention**

- Grooves
- Divergency towards gingiva
- Convergency and divergency of axial walls in horizontal plane(towards proximal space)

## Slot for amalgam

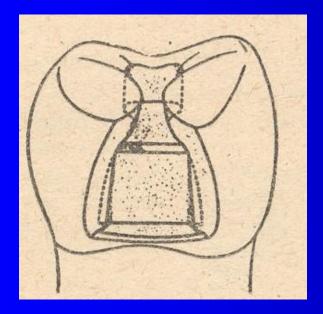
- Rule of the gingival wall
- -1 mm wide
- -90% angle towards the pulpal wall
- -outer line beveled if in enamel
- -horizontal groove

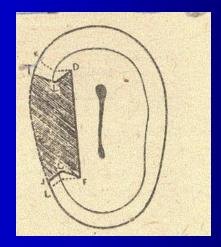






Sedelmayer J. Amalgám – zapomenuté řemeslo. Brno, 2000.

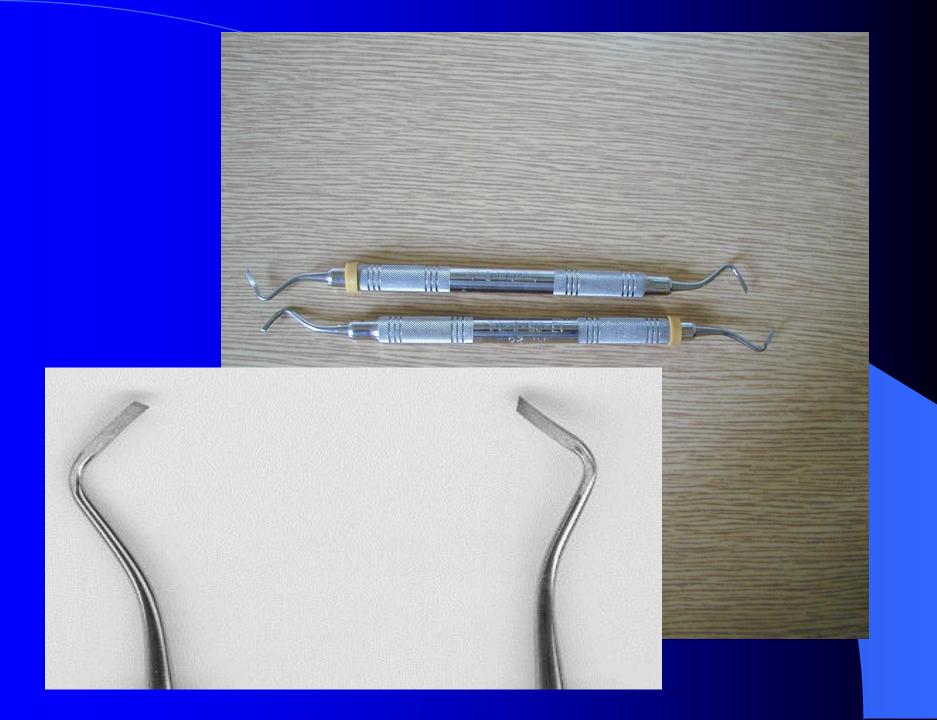




Bažant V. Konservační zubní lékařství, SPN Praha, 1962.

# Slot cavity

- Limited on proximal ridge
- Axial walls are divergent towards gingiva
- The proximal box has a typical picture of fish tail
- There are grooves:
- One horizontal in gingival wall
- Two vertical in axial walls



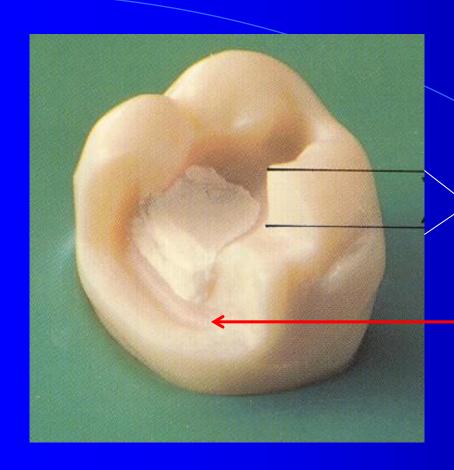






## Large defects

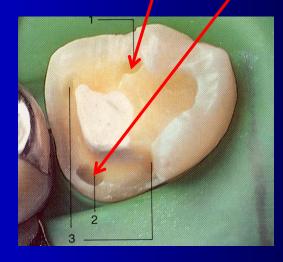
- In vital teeth if the cusp has been undermined due to dental caries
- Large defects in non vital teeth amalgam overlays
- Combination with the cavity on vestibular/oral surface

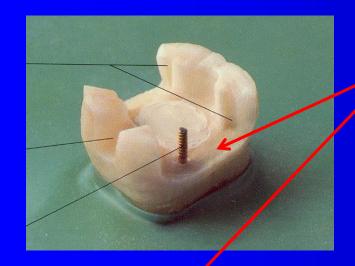


Cusp has been removed

The thickness of the filling 3 – 4 mm (at the cusp)

Retention Grooves, pins, slots



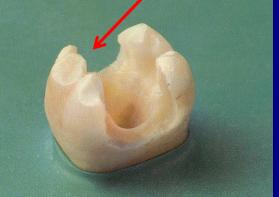


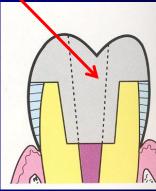


Parapulpal pins

Intrapulpal posts (root canal posts)

Retention in the endodontic cavity





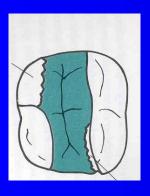
# Large amalgam restoration - overlays

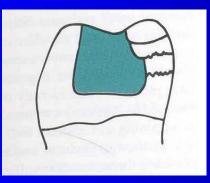


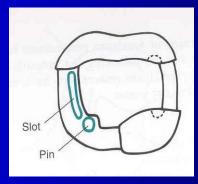


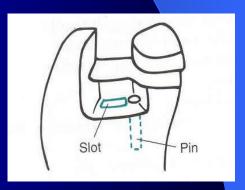
# Amalgam

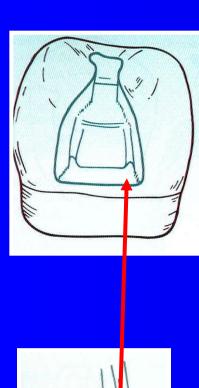
Exact work!

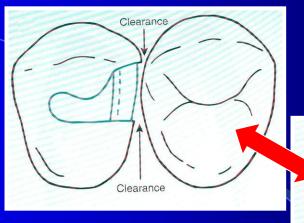




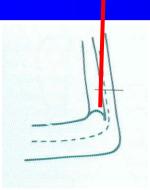


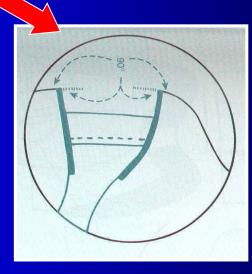




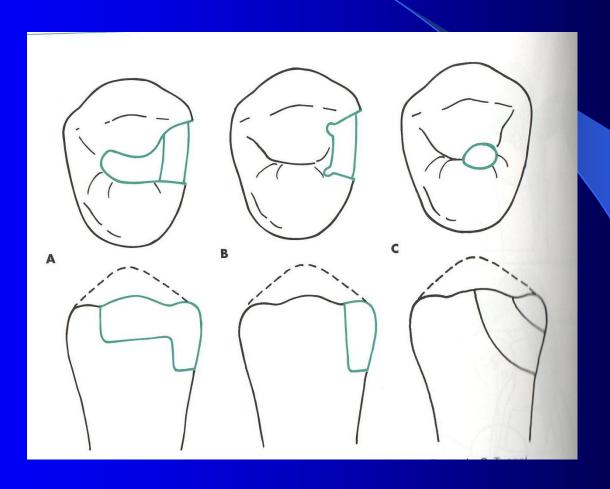








# Basic modifications



#### Rules for large restorations

Clear and sharp outlines – cavosurface margin

Thickness of the amalgam (the cusp 3 – 4 mm)

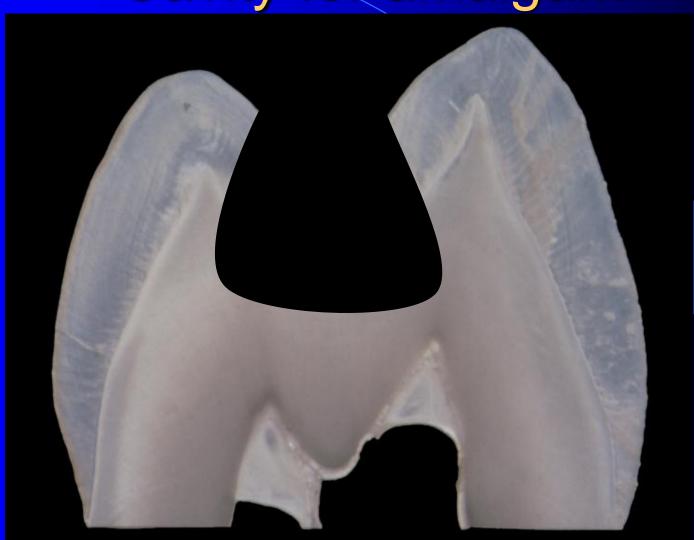
- Autoretention
- Grooves
- Pins, slots
- Parapulpal pins
- Intrapulpal posts root canal posts

Resistance – acc to general rules

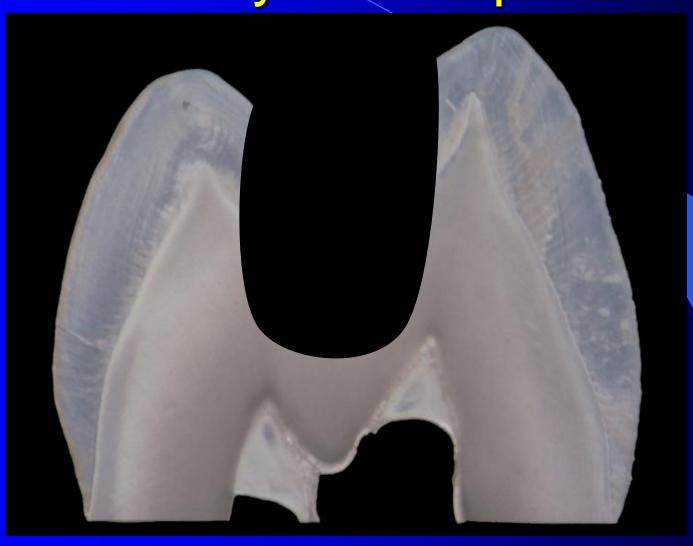
# Preparation for adhesive materials – composites

- No extension for prevention (adhesion)
- No grooves
- No undercuts
- Rounded box
- Bevel the axial walls and the outer edge od the gingival wall
- Small isolated cavities are possible

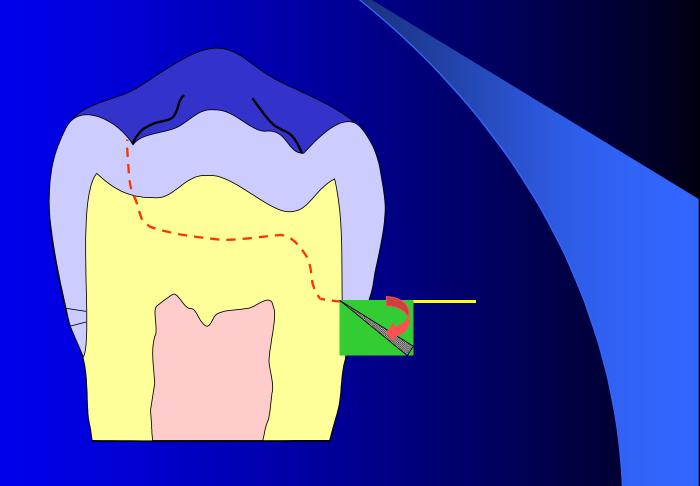
# Cavity for amalgam



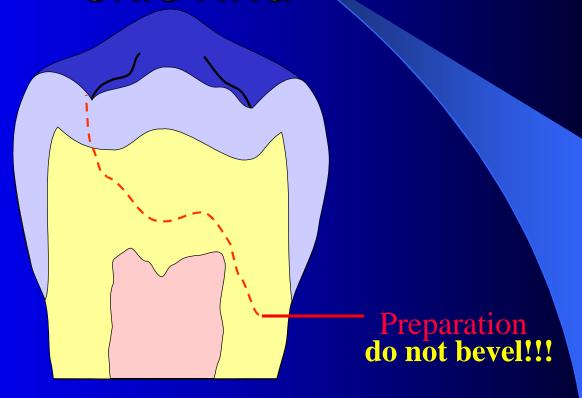
# Cavity for composite



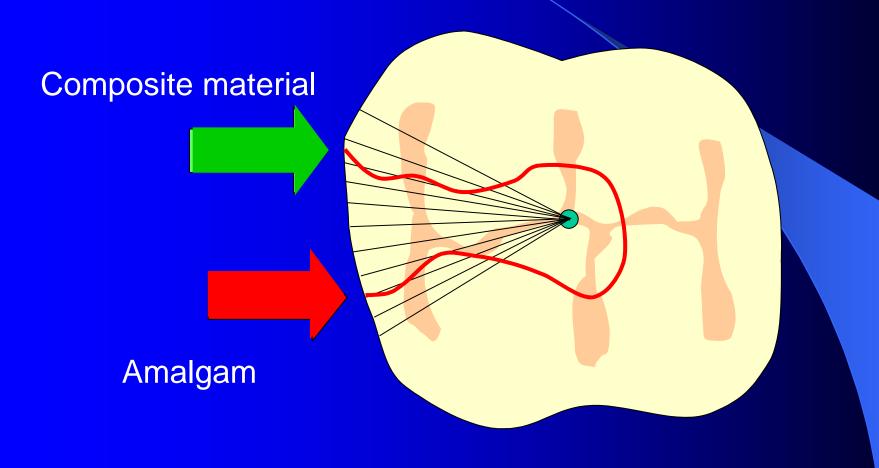
# Bevel on the gingival wall



# Ohlazení zevní hrany gingiválního schůdku mimo sklovinu



#### Bevel of enamel on axial walls























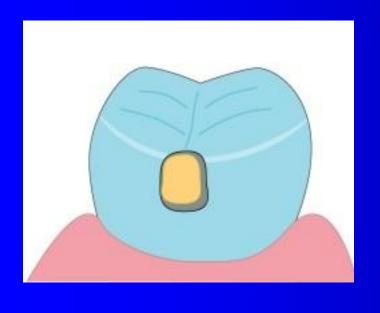


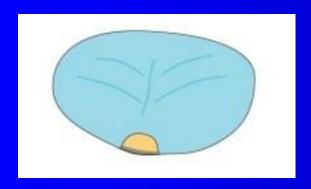


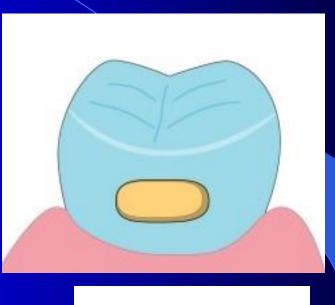


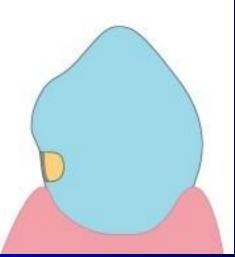


## Alternative preparation – adhesive slot









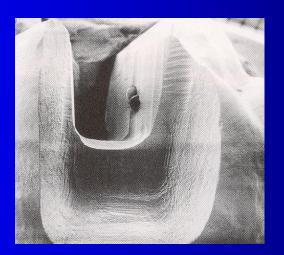






















## Glassionomer and class II.

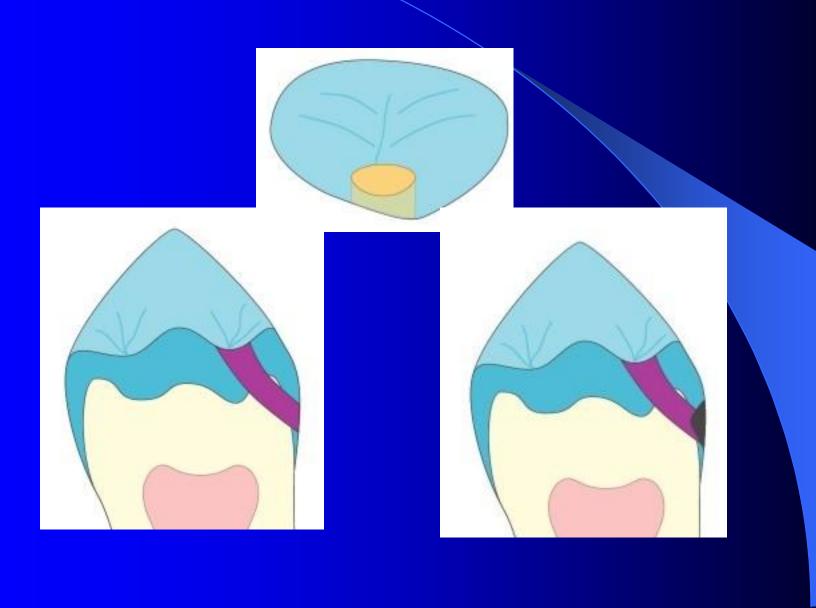
Temporary filling – first phase for the sandwich technique

Tunnelová filling (preparation)





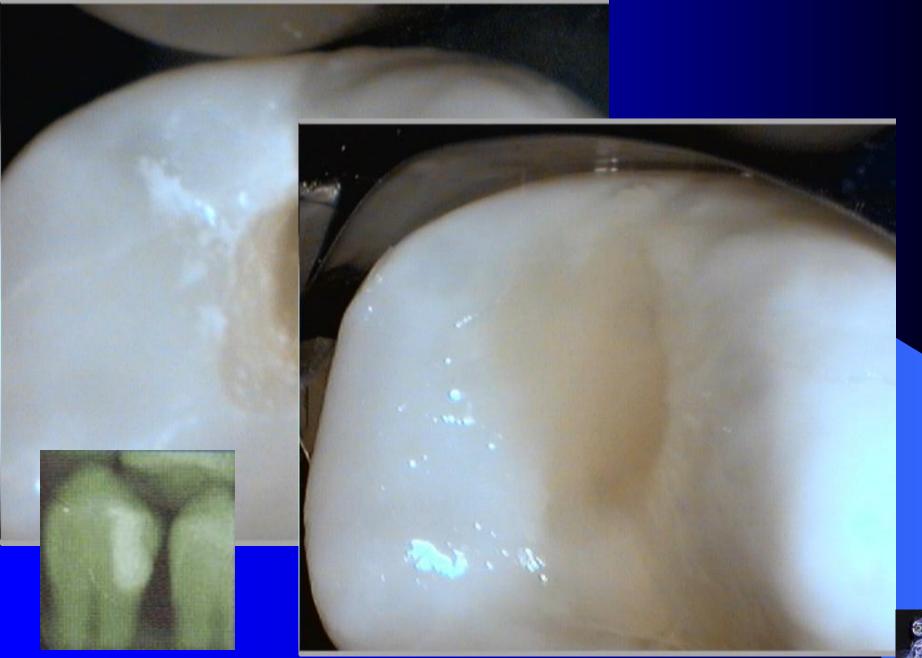
## **Tunnel preparation**



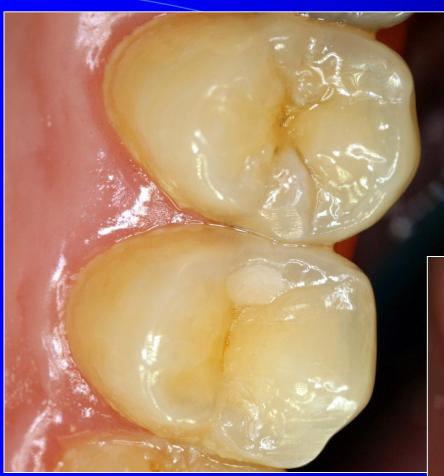












- 1. Low caries risk
- 2. Proximal ridge without infra
- 3. Good cooperation
- 4. Small caries lesion



- 1. Loups or microscope
- 2. Miniinstruments
- 3. Dezinffection
- 4. GIC in capsules
- 5. BW post op

