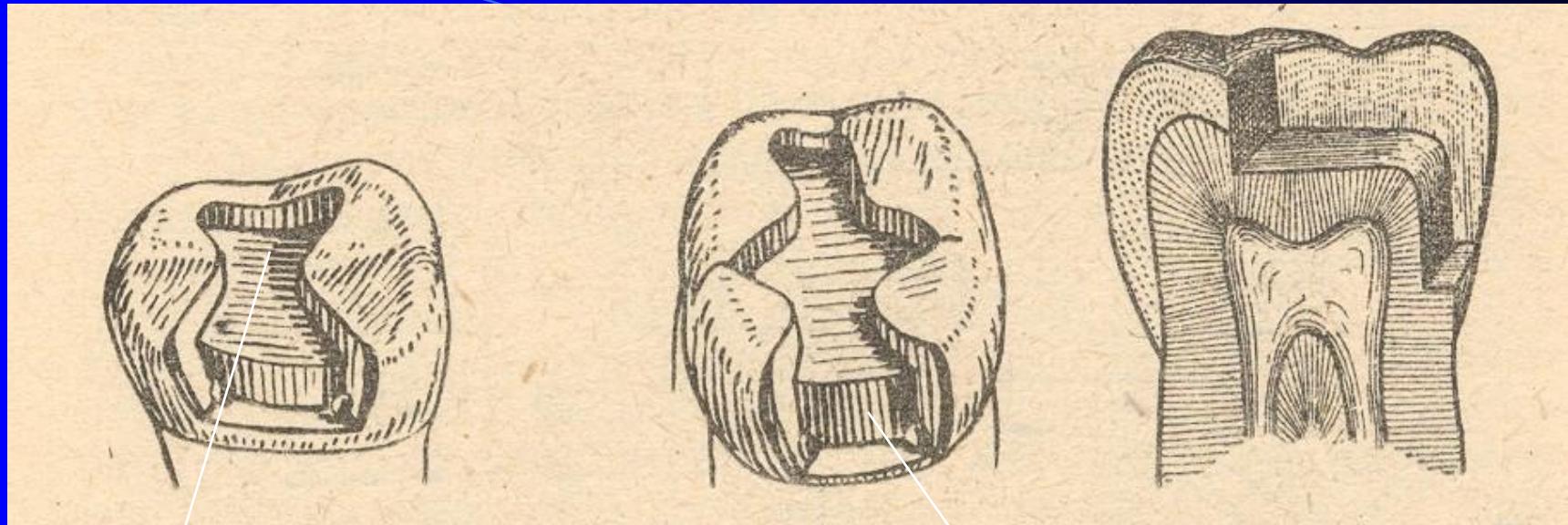


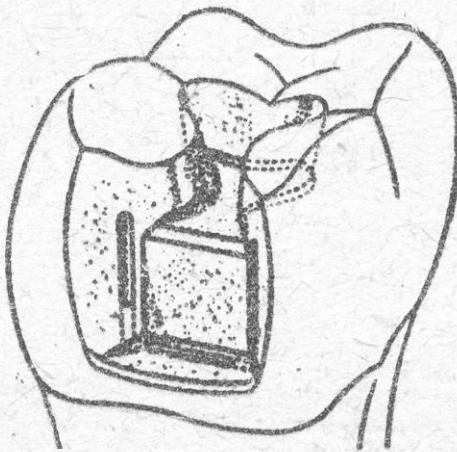
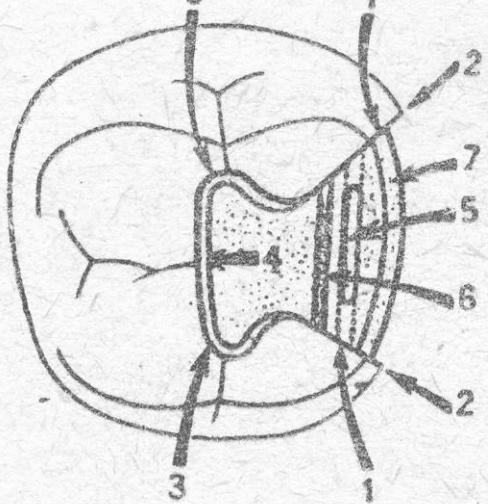
# Class II. – modifications for amalgam

- Composed cavity
- Slot
- Large defects - restoration with the replacement of cusps

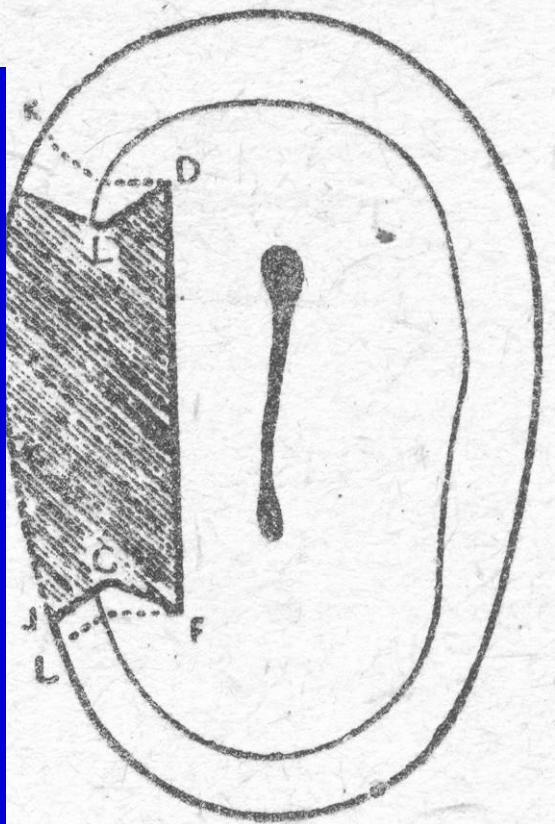


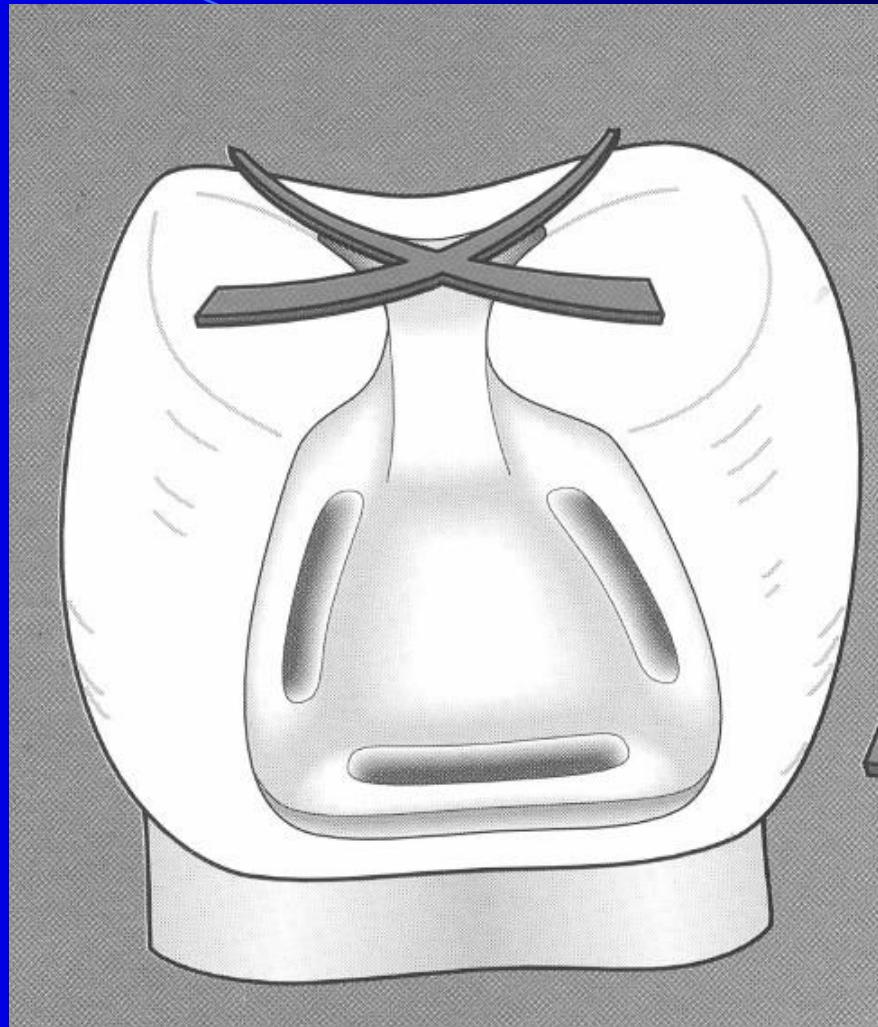
Occlusal cavity

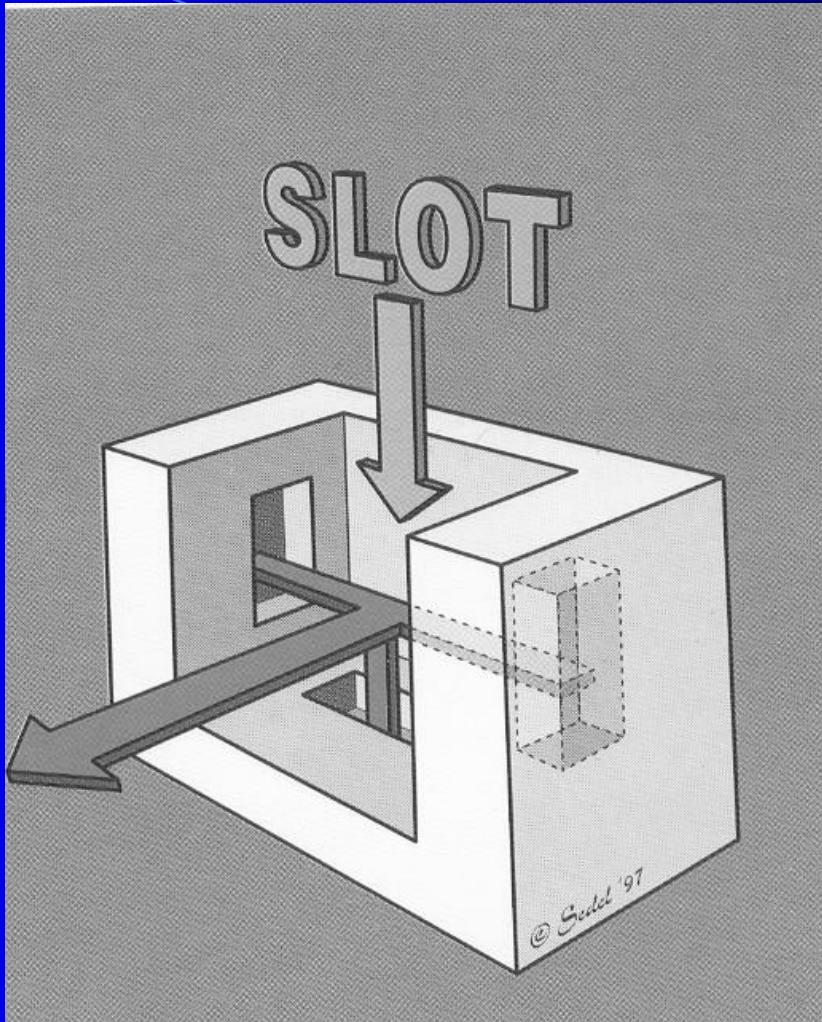
Proximal cavity



Obr. 114. III







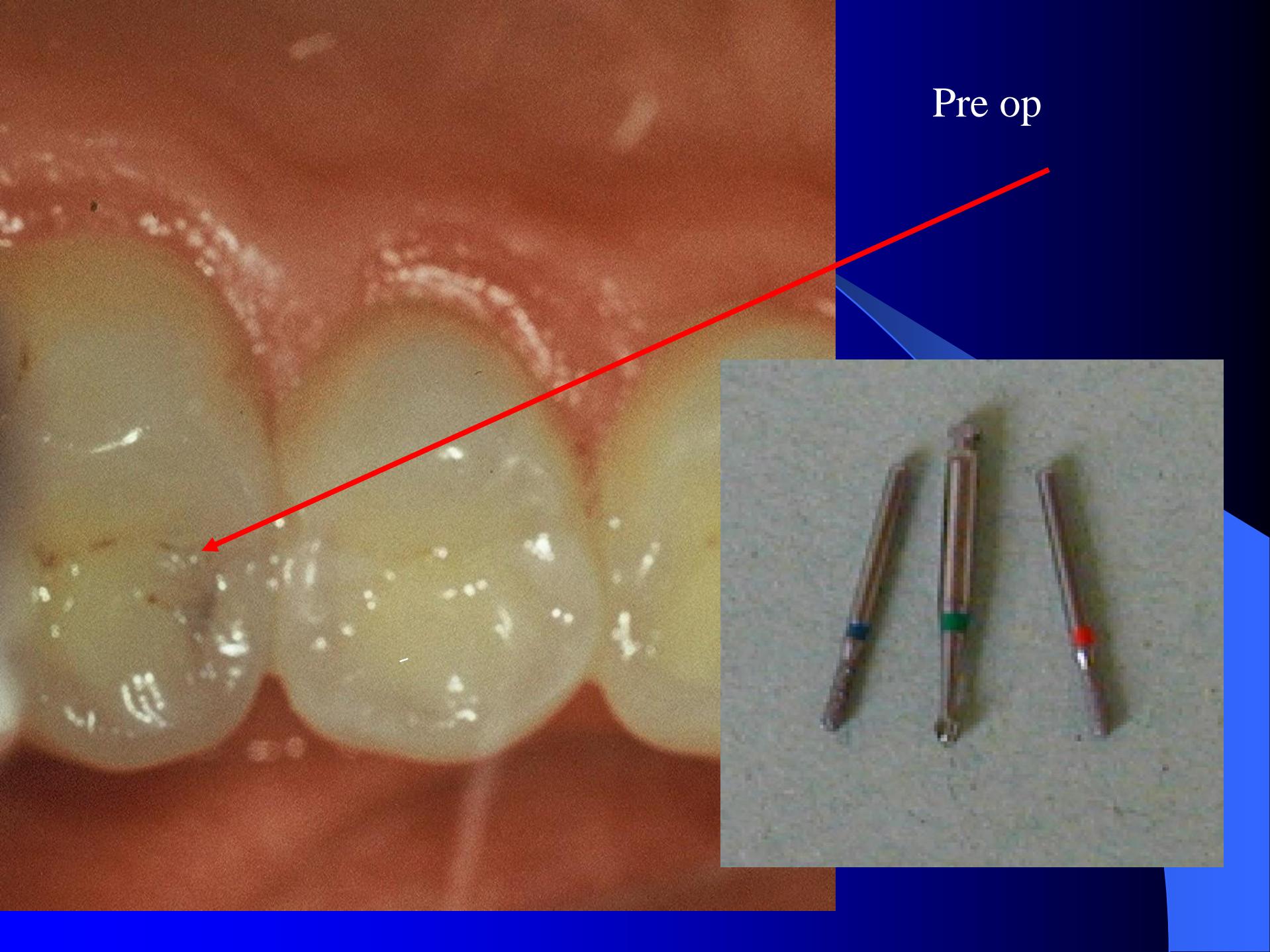
Slot is a cavity that is open on occlusal surface only in proximal ridge.

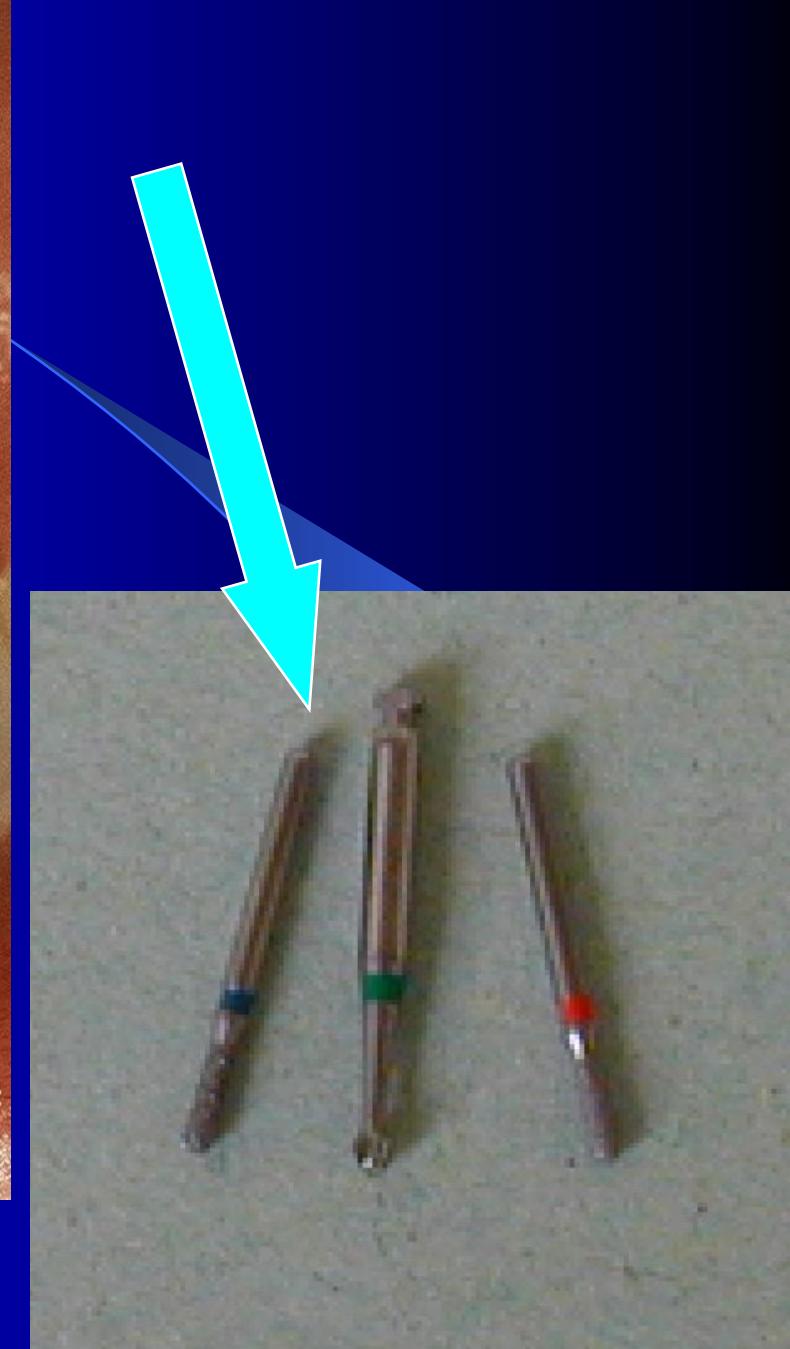


# Slot for amalgam

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

Pre op





## Access to the cavity

lroubal@med.muni.cz



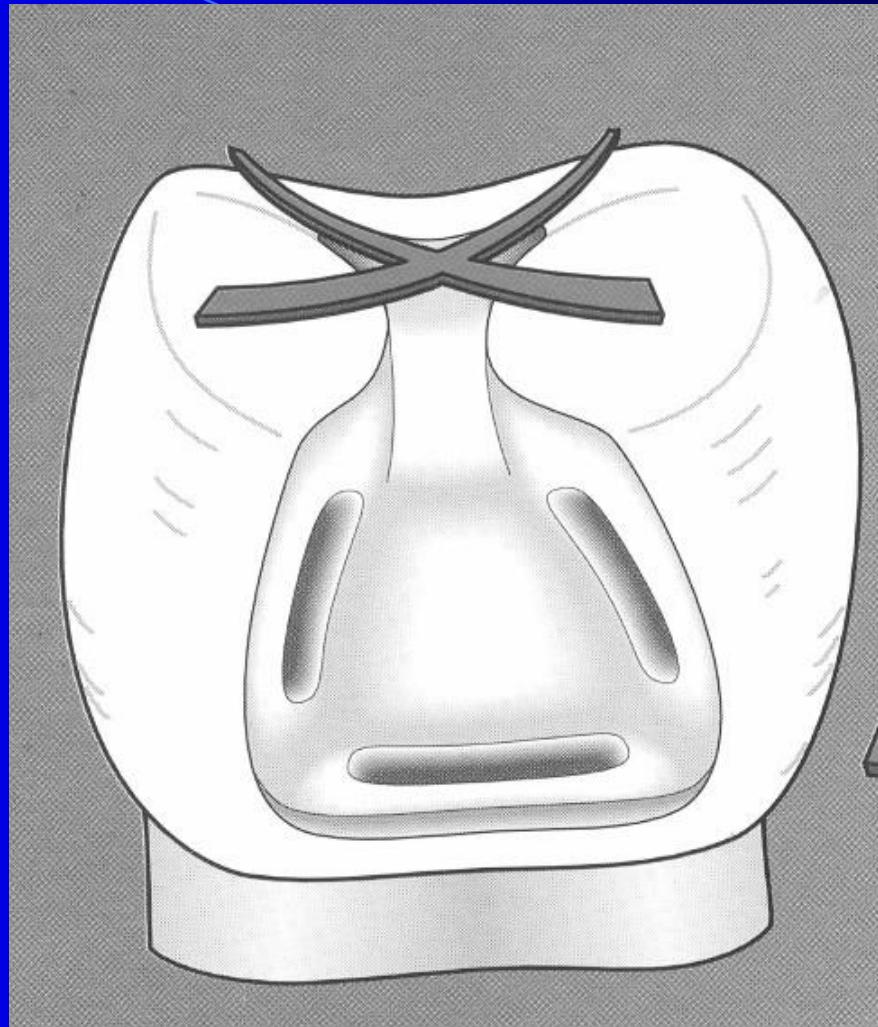
# Slot for amalgam

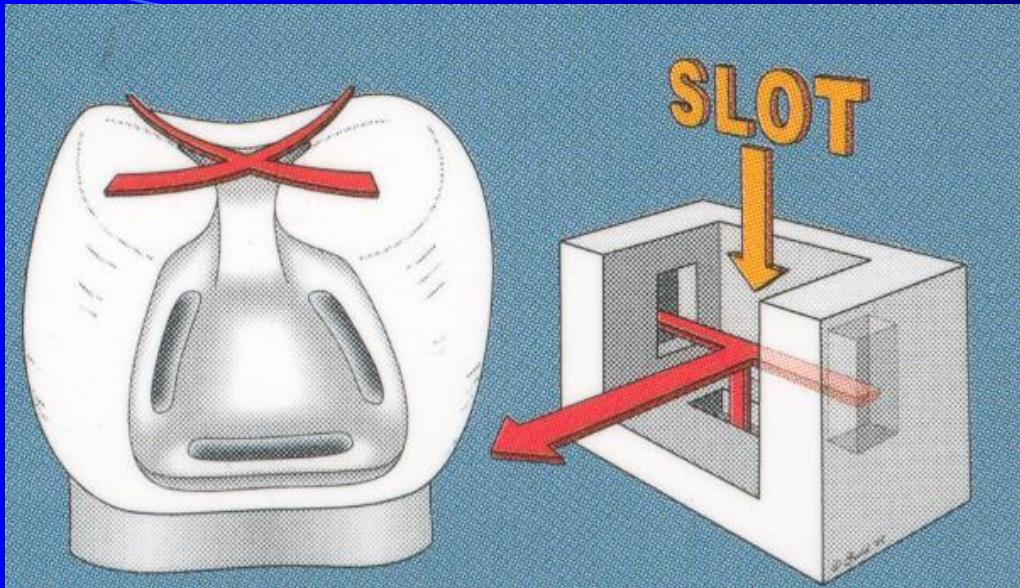
- Autoretention
  - Grooves
  - Divergency towards gingiva
  - Convergency and divergency of axial walls in horizontal plane
- Rule of the gingival wall

# Slot for amalgam

- Rule of the gingival wall

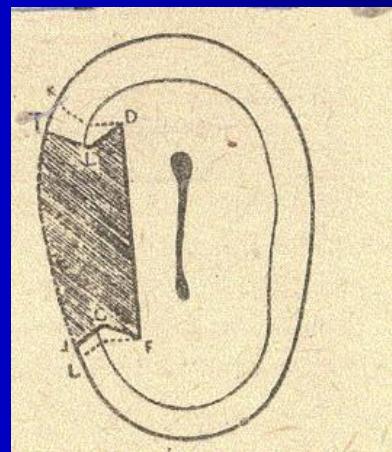
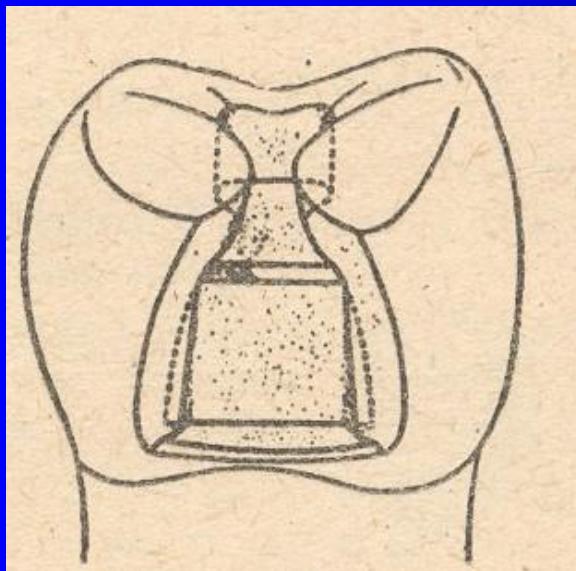
90% angle towards the pulpal wall  
outer line beveled if in enamel  
horizontal groove





Sedelmayer

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



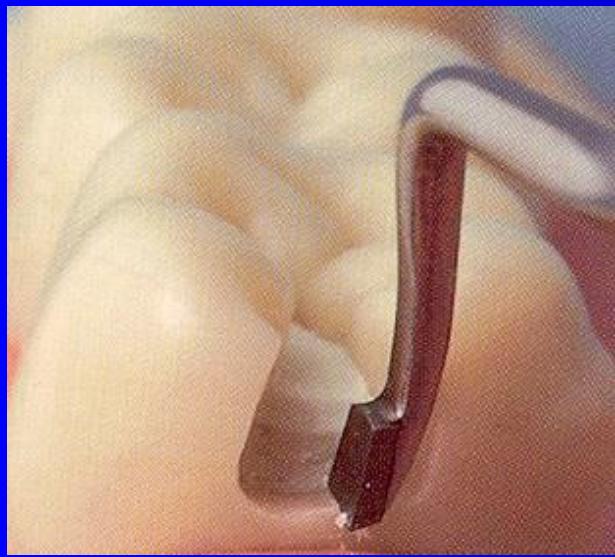
Bažant V.

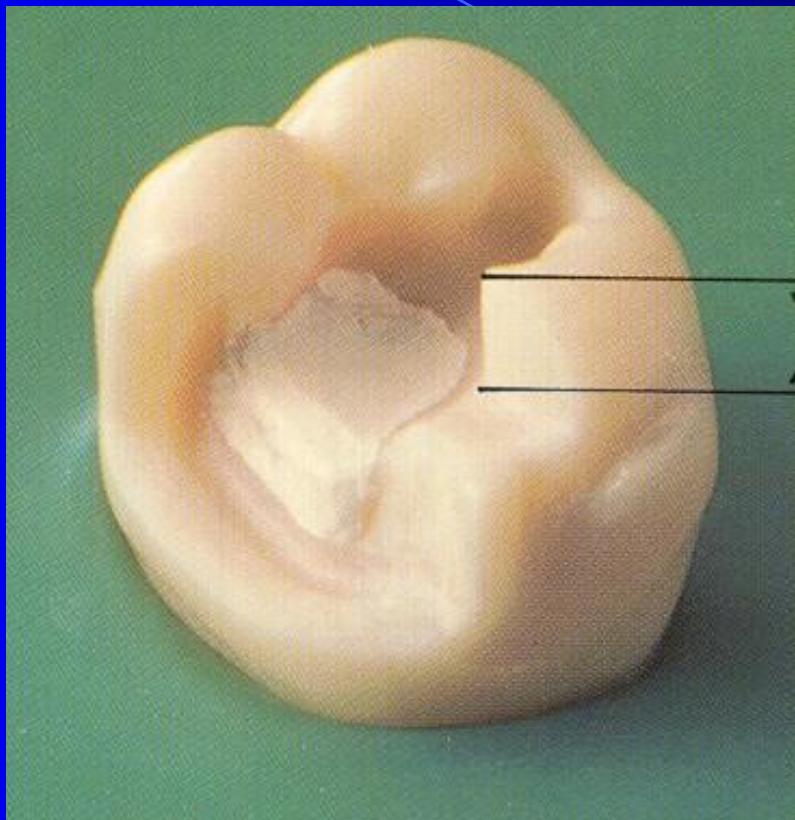
*Konservační zubní lékařství, SPN Praha, 1962.*

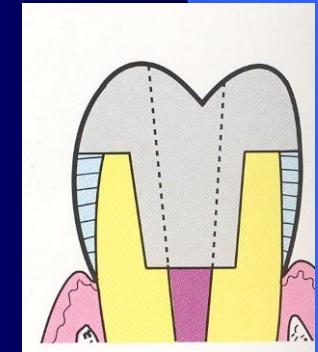
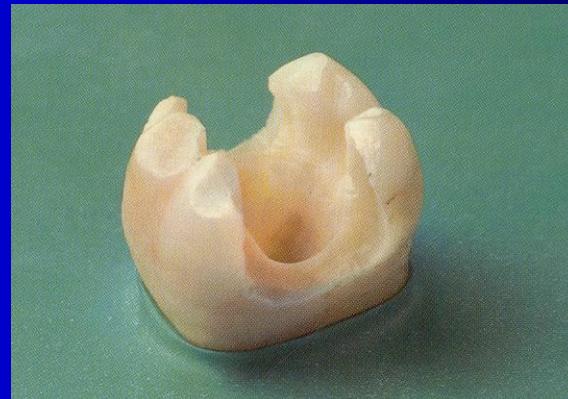
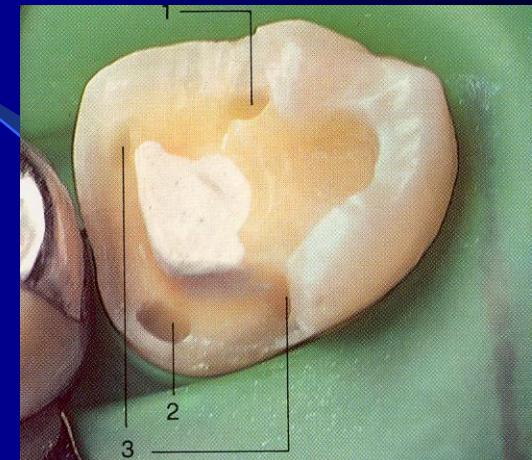
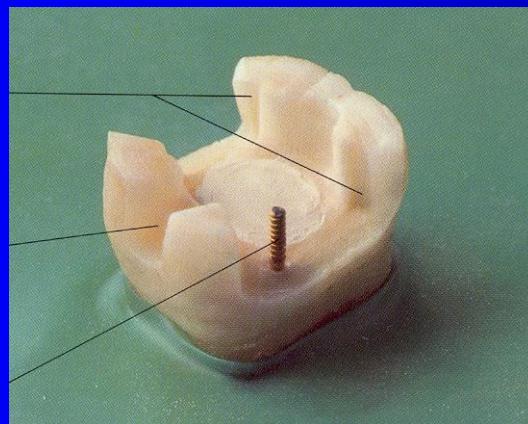
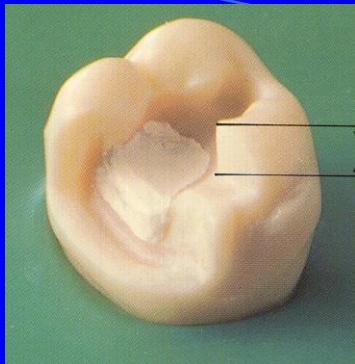
# Slot cavity

- 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





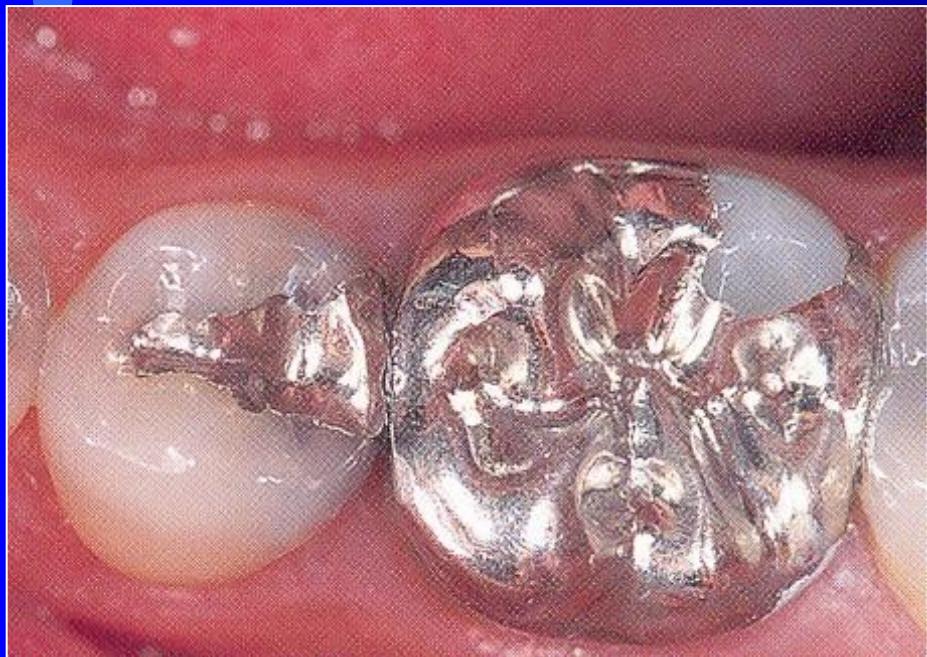




# Rules

- Clear and sharp outlines
- Autoretention
  - Cavities - pins
  - Grooves

# Large amalgam restoration - overlays



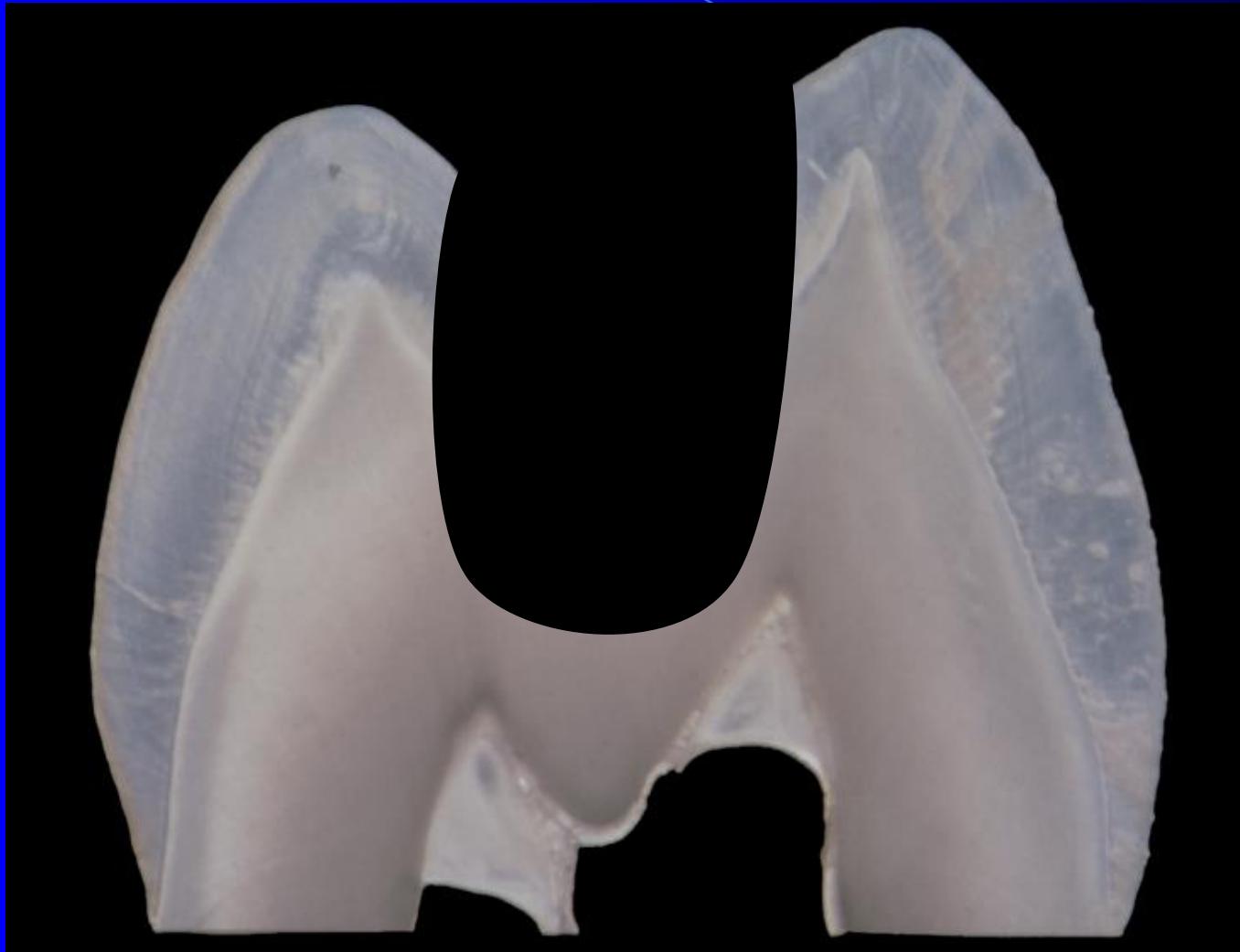
# Preparation for adhesive materials

- No extension for prevention (adhesion)
- No grooves
- No undercuts
- Rounded box
- Acid etching
- Priming bonding
- Placement of the material using matrices.

# Cavity for amalgam



# Cavity for composite







# Sectional matrices

Matrice  
Separation ring  
Wedge





# Step I.: Pre - wedging

Insertion of the wedge before preparation

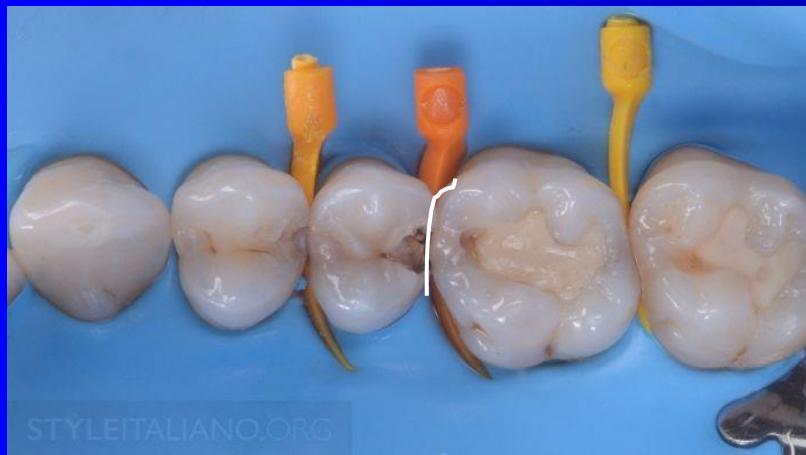
Compression of gingiva

Separation of teeth

Protection of the tooth



# Step 2: preparation



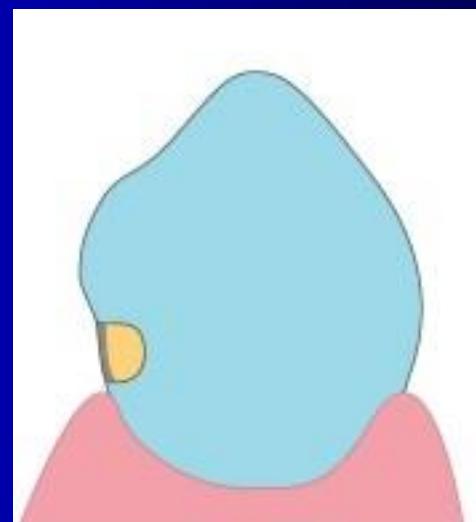
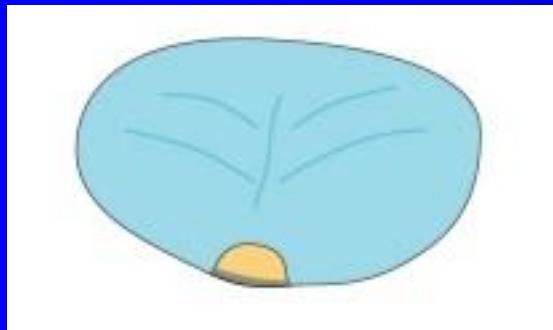
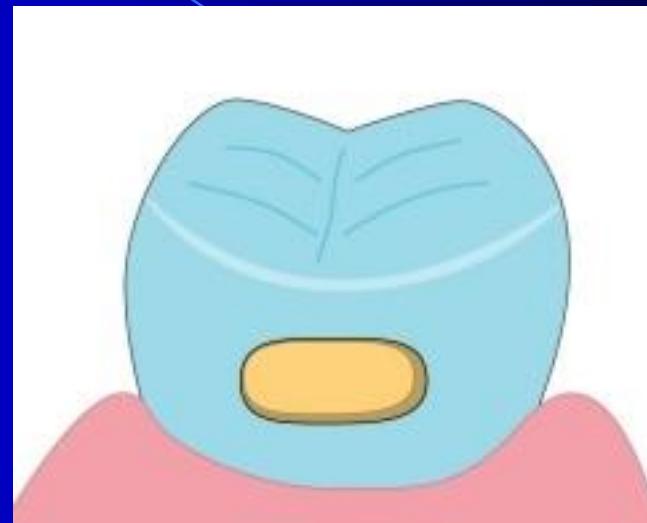
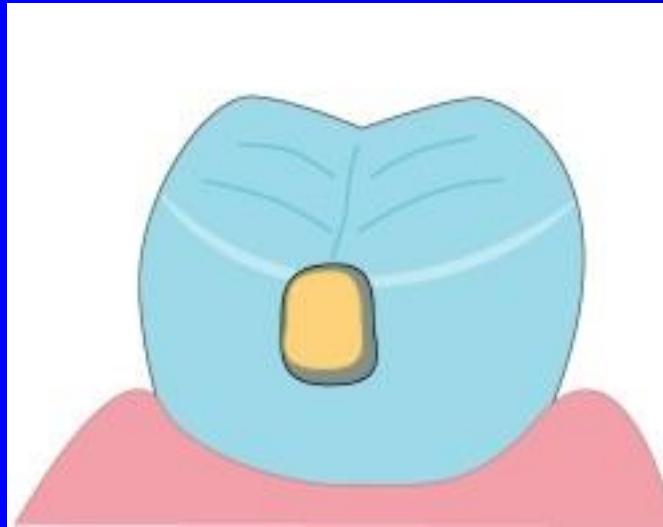
# Step 3: insertion of the matrix, wedge and separator (ring)

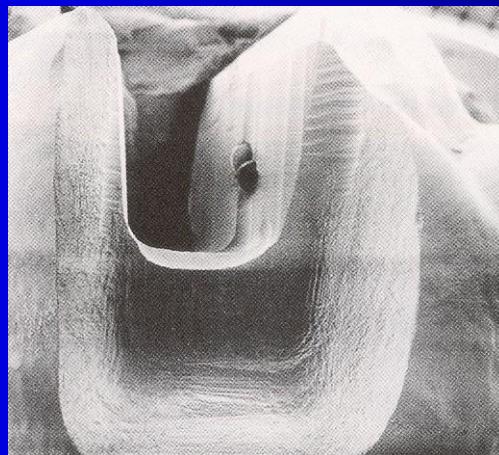
- Insertion of the matrix (0,5 mm below free gingiva)
- Insertion of the wedge from the vestibular or oral side
- Insertion of the separator

# Step 4 Zhotovení výplně

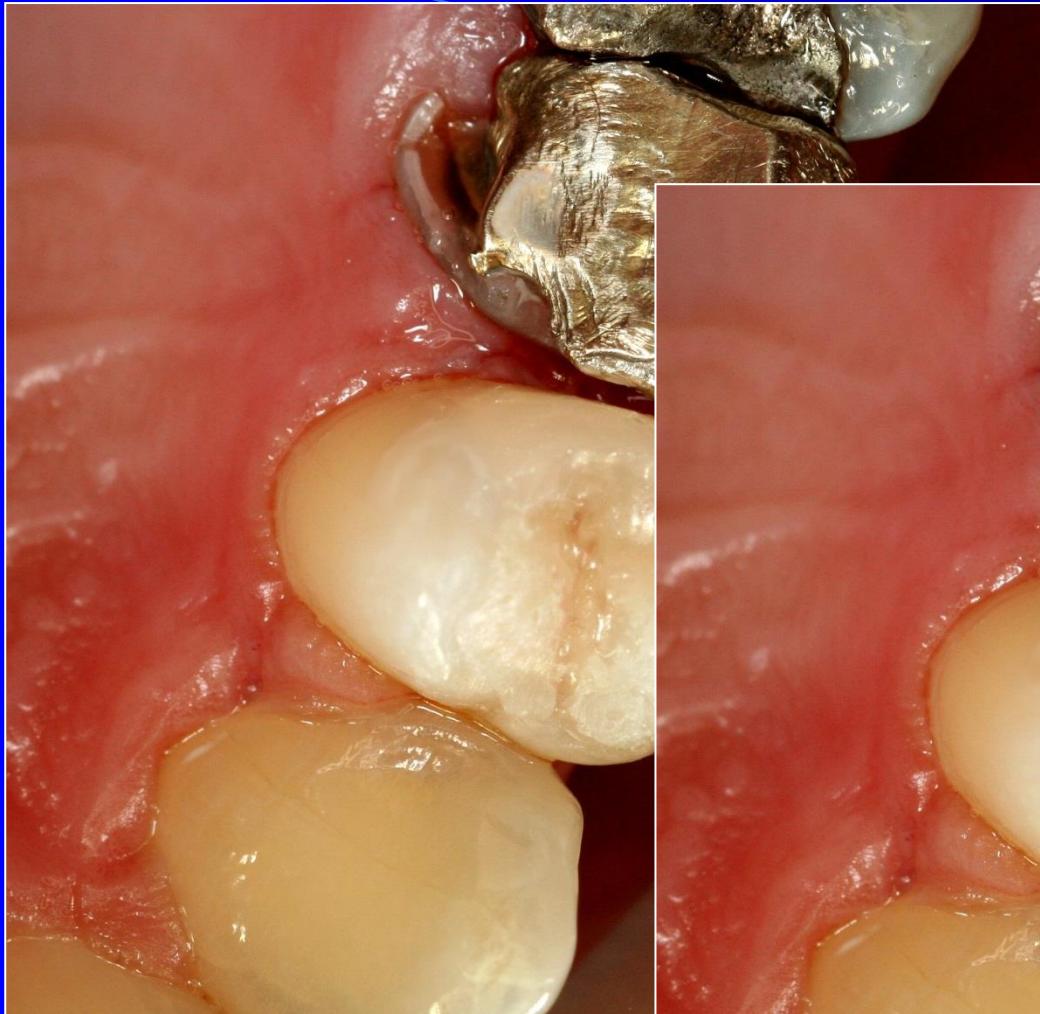


## Alternative preparation - slot



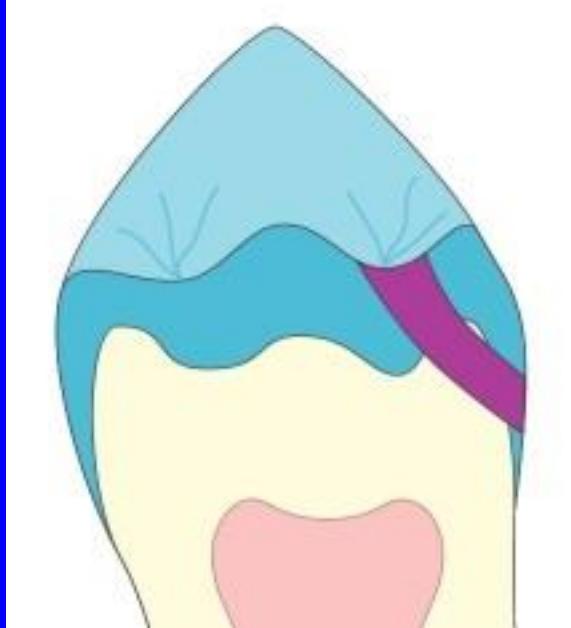
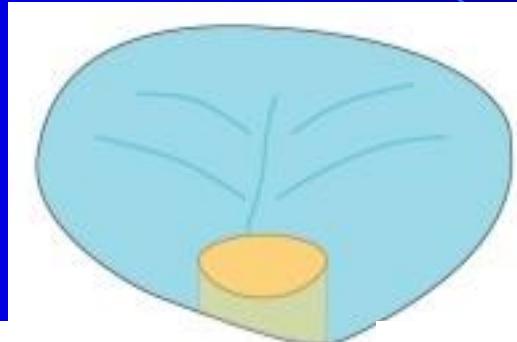




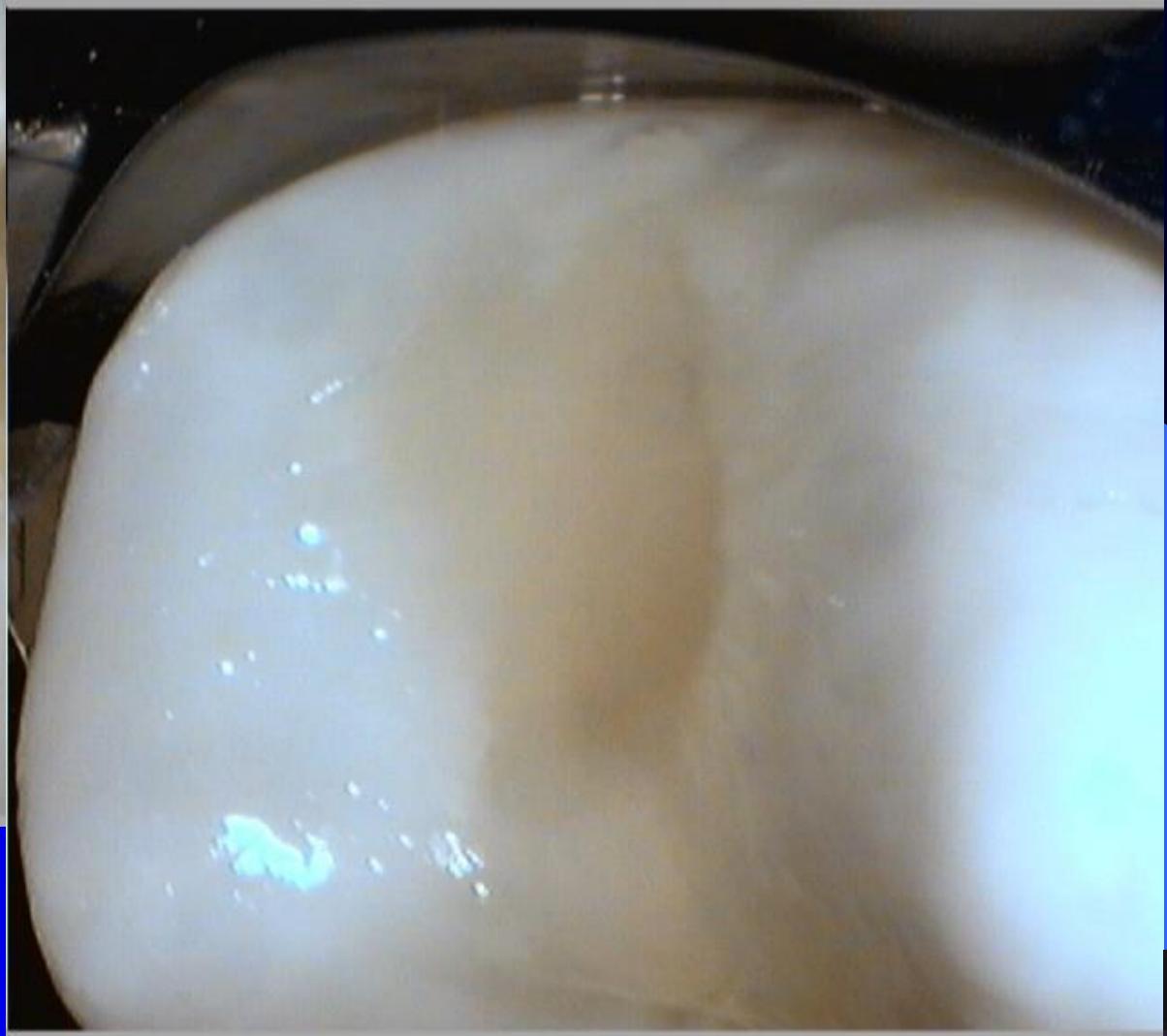




# Tunnel preparation









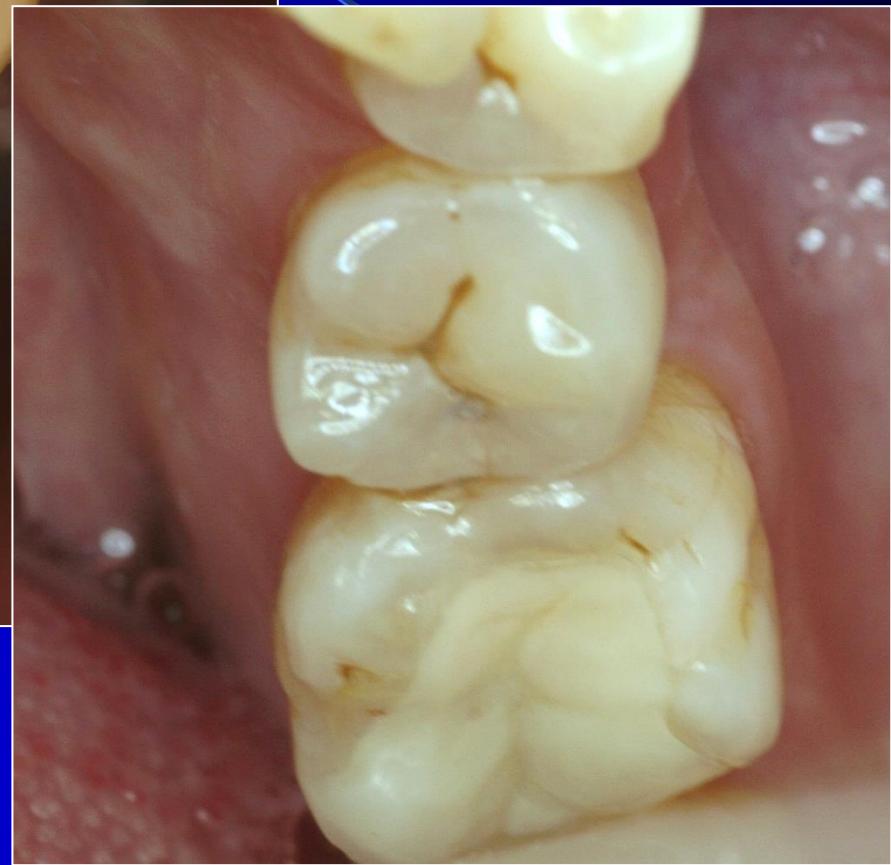
Success?

1. Low caries risk
2. Proximal ridge without infracra
3. Good cooperation
4. D2



Success

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







## Úspěch tunelu????

1. Lupové brýle nebo mikroskop
2. Miniaturní instrumenty
3. Dezinfekce kavyty
4. Jedině GIC v kapslích
5. BW post op

## Úspěch tunelu????

1. Nízké riziko sklonu k novým kazům
2. Spolupracující pacient
3. Okrajová lišta bez infrakcí
4. D2 – D3



# Rules

- Clear and sharp outlines
- Autoretention
  - Cavities - pins
  - Grooves





























# Adhesive slot preparation

