Zsuzsanna Tóth D.M.D., Ph.D.
Semmelweis University
Dept. of Conservative Dentistry

DEFINITION

• INLAY

» Involves occlusal and proximal surface(s) of a posterior tooth and may cap one or more, but not all of the cups

• ONLAY

» Involves proximal surface(s) of a posterior tooth and caps all of the cups

Metall

Ceramic

Glass ceramic

Direct Ceramic (Cerec)

Gold ceramic

Composite

Direct - Indirect

- ➤ Metall (gold-, silver-palladium alloy)
- **Composite**
- > Ceramic

Laboratorium - Chair-side Technik

Composite

CAD-CAM

CAD/CAM:

Computer Aided Design

Computer Aided Manufacturing

Cavity preparation for cast metal inlays

- ➤ Higher strenght of a casting alloy is needed
- Superior control of contours and contact is desired
- ➤ Withstand occlusal loads placed on the restoration
- ➤ Distribute occlusal loads over the tooth → decrease the chance of tooth fracture
- ➤ Conserve intact facial and lingual enamel → conducive to maintaining the health of contiguous soft tissues

INDICATIONS - CONTRAINDICATIONS I.

- ➤ Higher strenght, superior contours, contact is desired (patient's wish)
- ➤ Weakened teeth → distribute occlusal loads → decrease the fracture
- Extensive proximal caries (subgingival margin)
- ➤ More different restorations and caries → restore all lesions with one casting
- Restore root canal filled teeth
- Fracture lines

INDICATIONS - CONTRAINDICATIONS II.

- ➤ Diastema closure, occlusal plane correction
- Removable prosthodontic abutment, bridges
- ➤ Dental rehabilitation with cast metal alloy
- Economics and patient appreciation
- > Age of the patient
- **Esthetics**

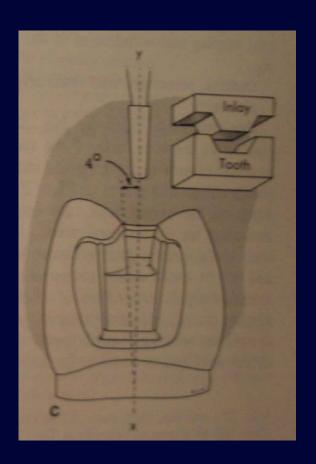
Cavity preparation for class II cast metal inlays

- Convenience form
- Outline, retention and resistance forms
 - Occlusal step
 - Enameloplasty
 - Dovetail retention form
 - Proximal boxing
- Final cavity preparation
 - Removal of carious dentin
 - Preparation of bevels and flares

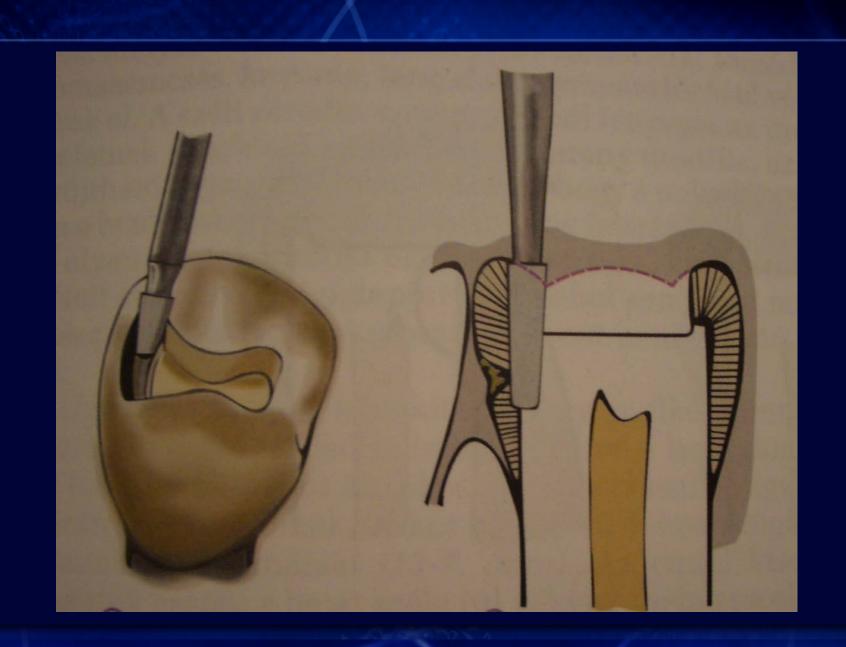
Cast metal restorations

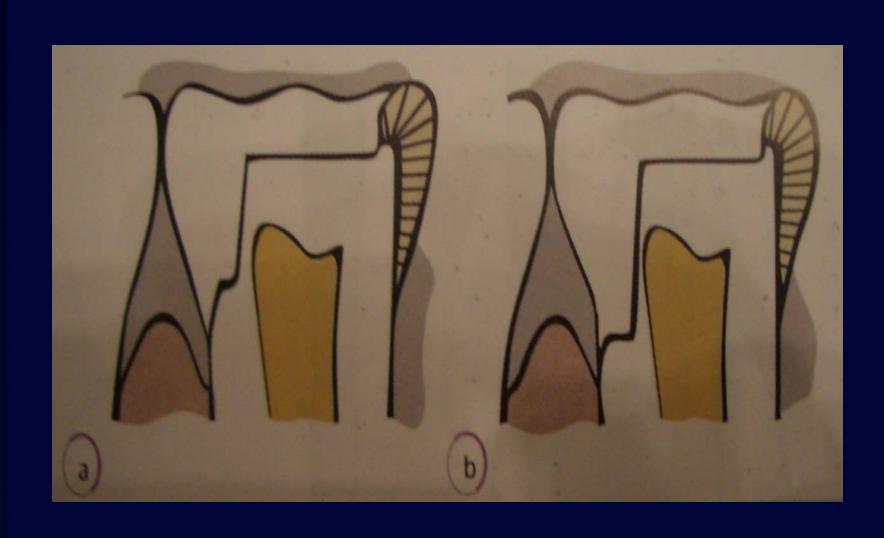
Cast metal restorations

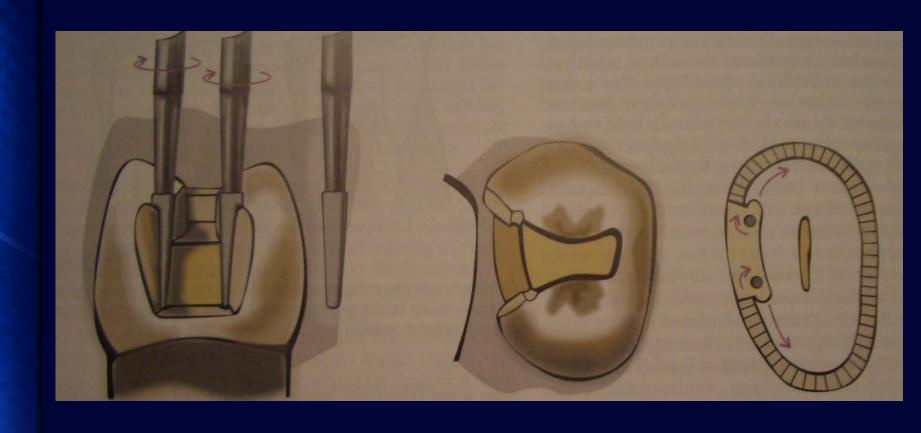


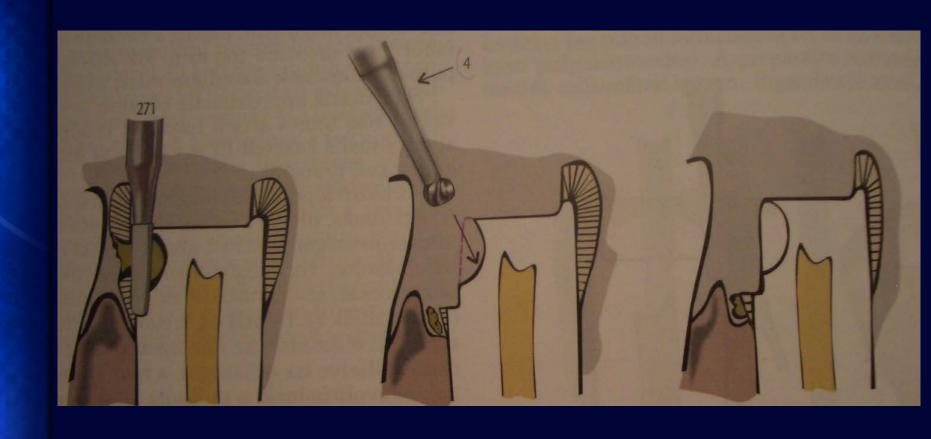


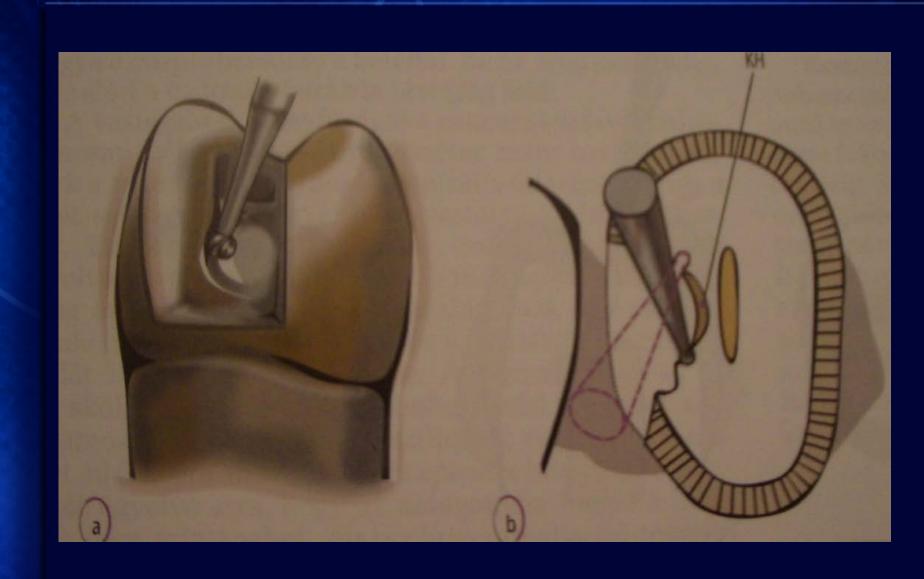


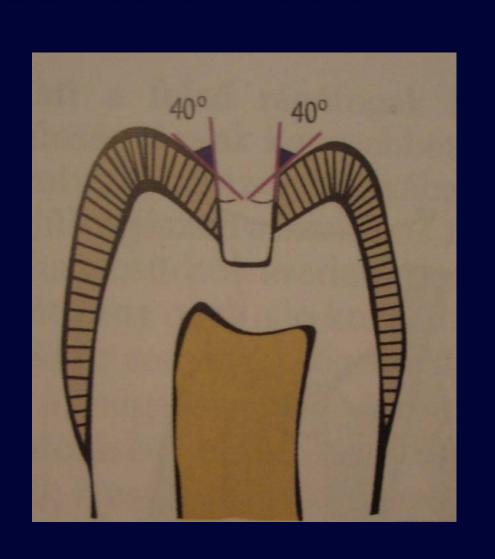




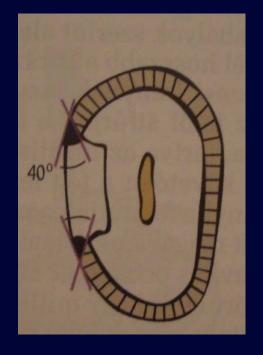


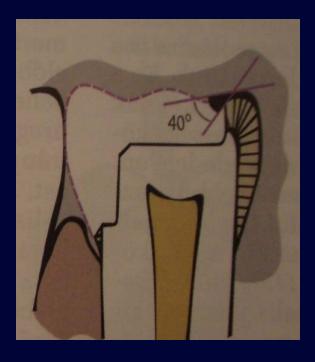


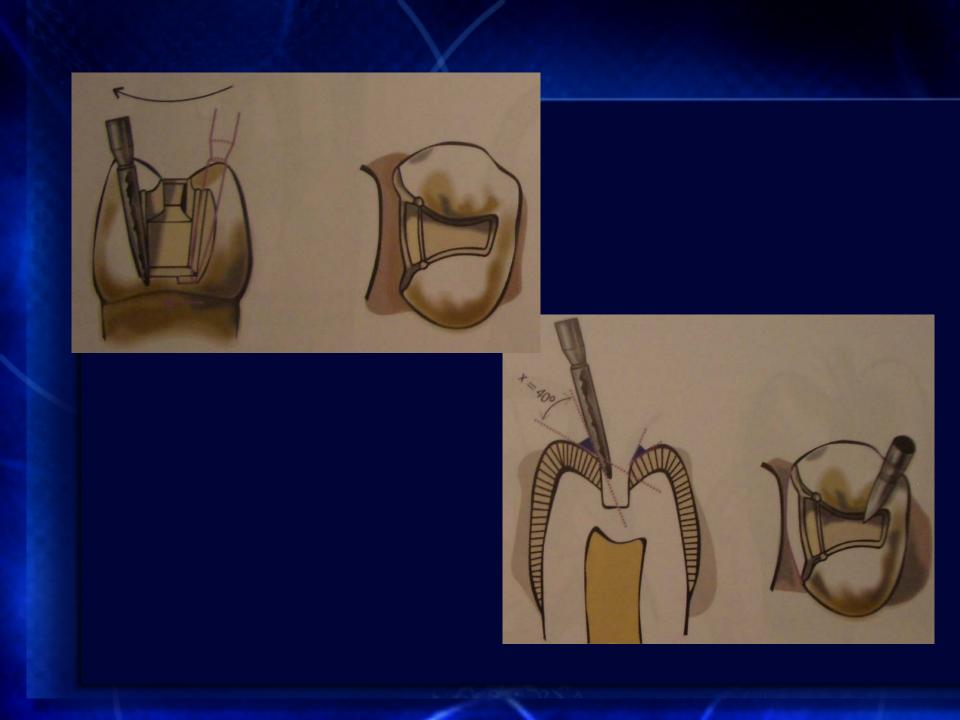


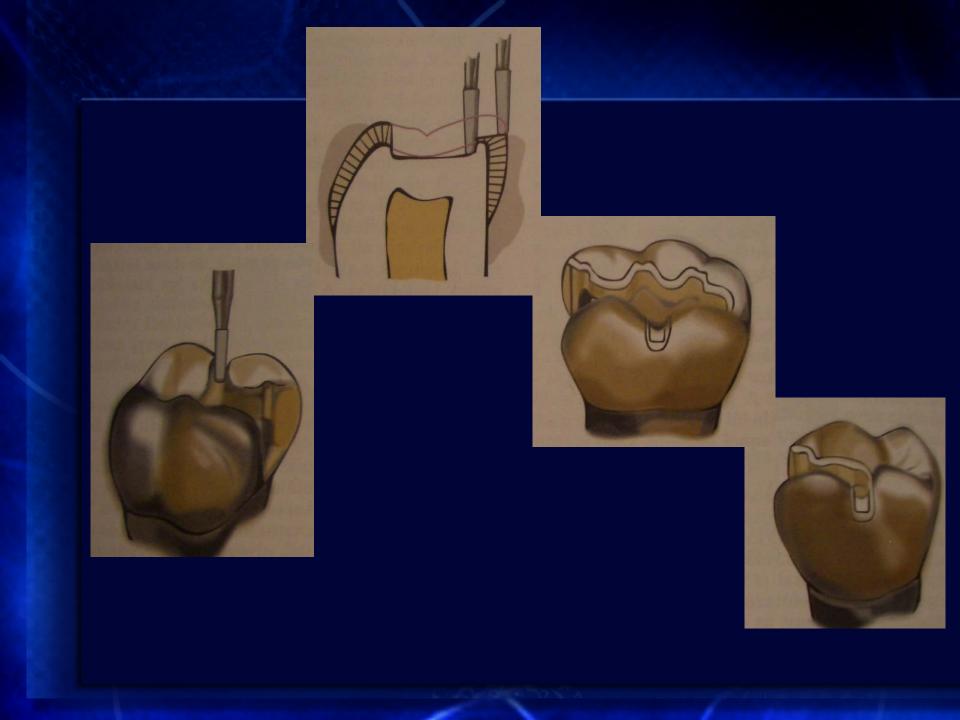


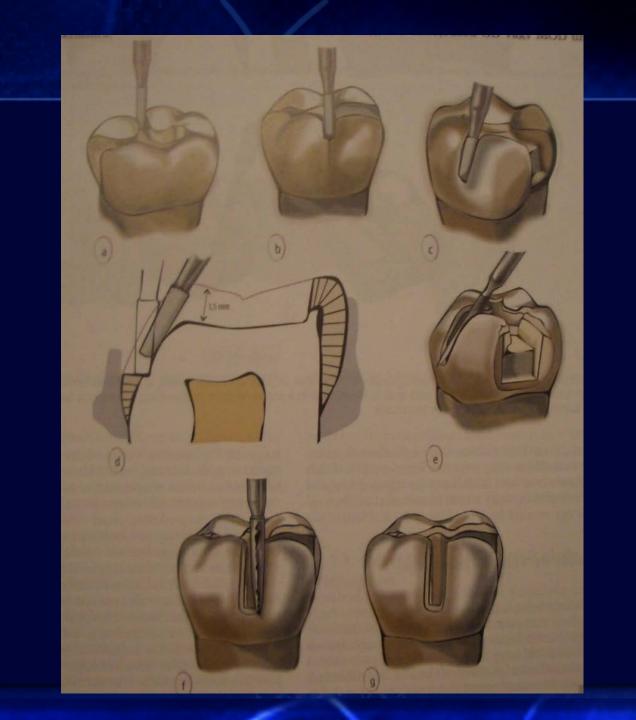


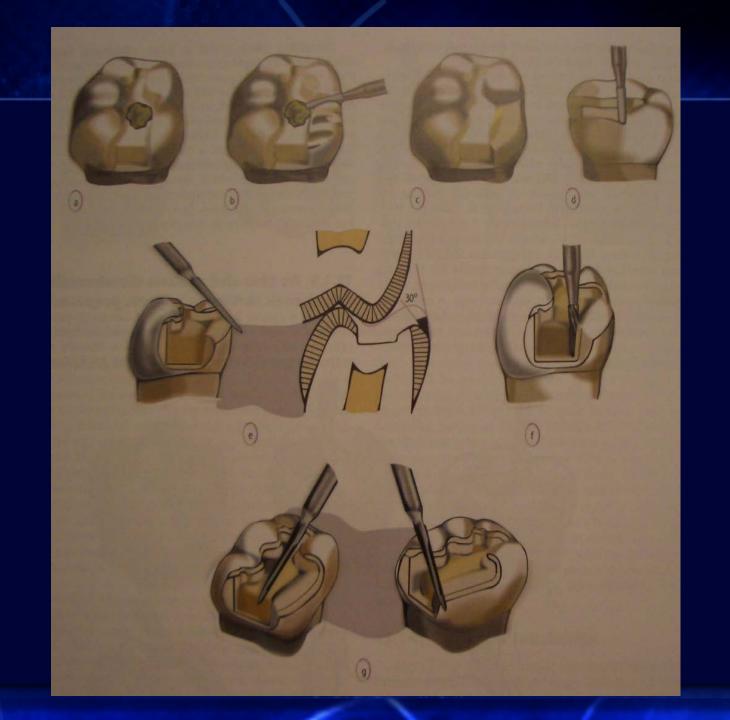




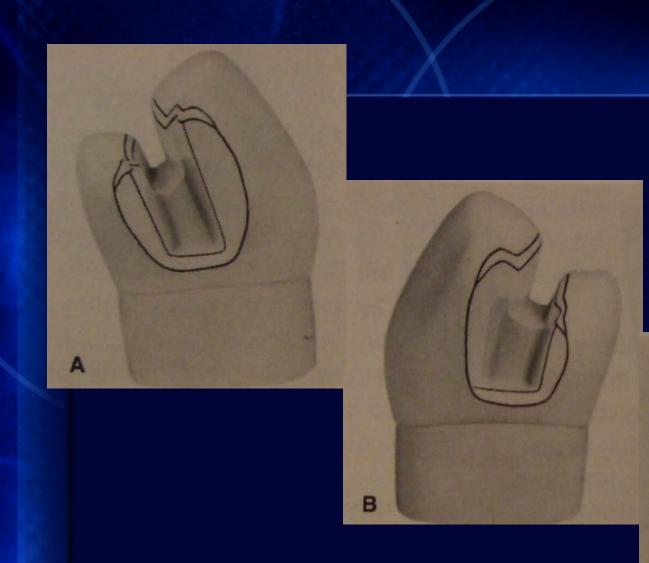


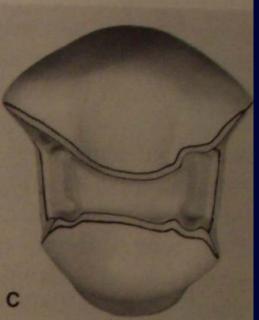


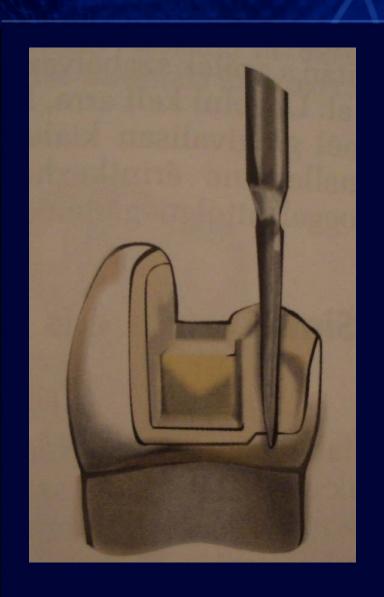




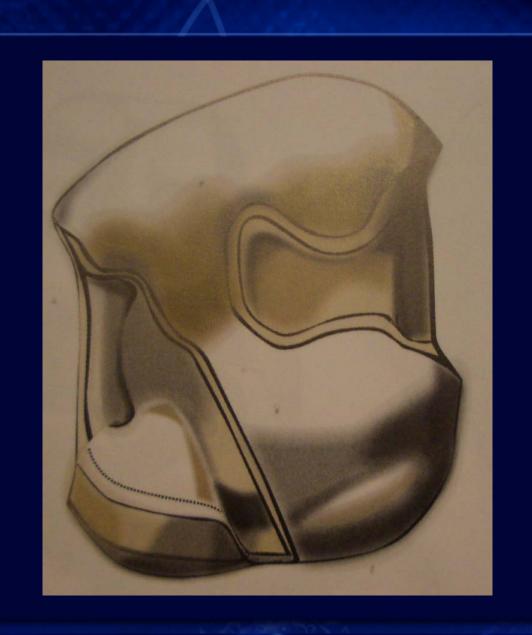


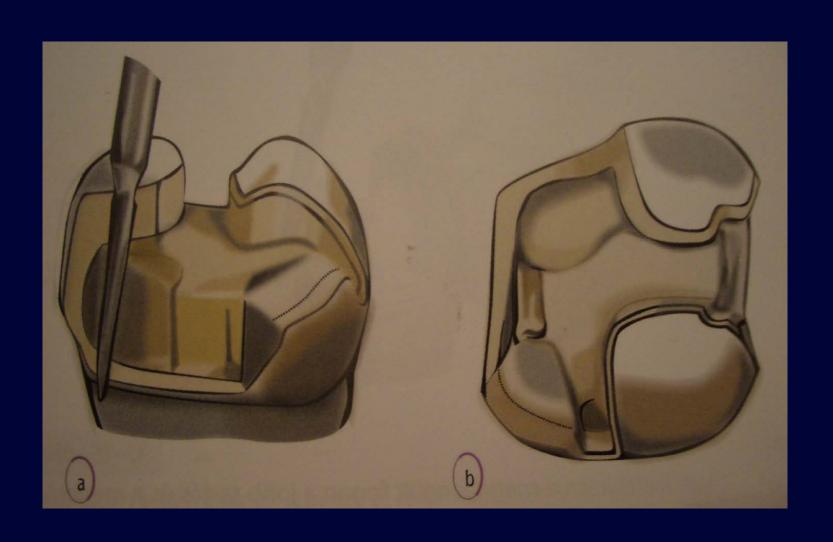


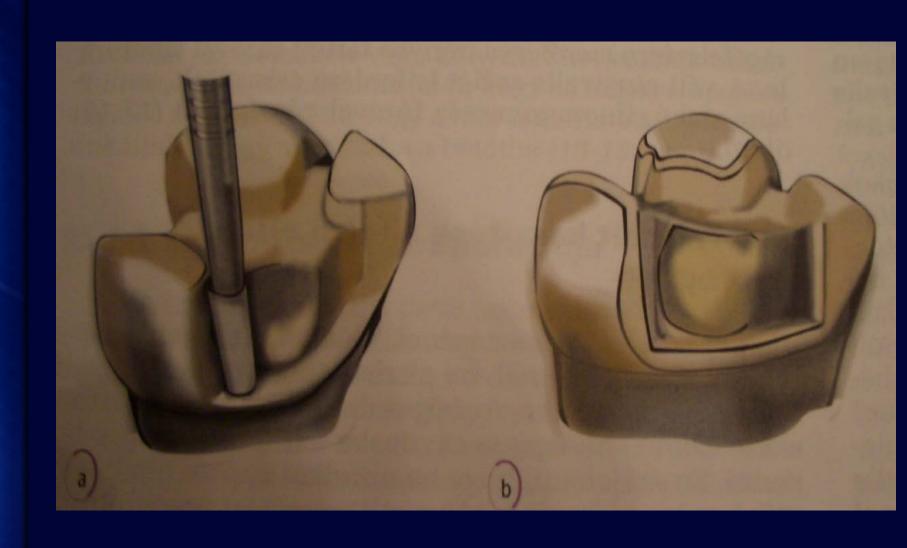


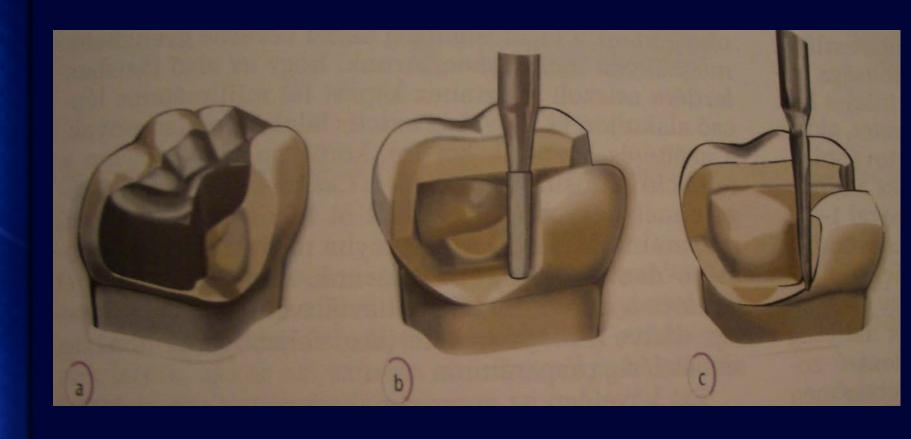


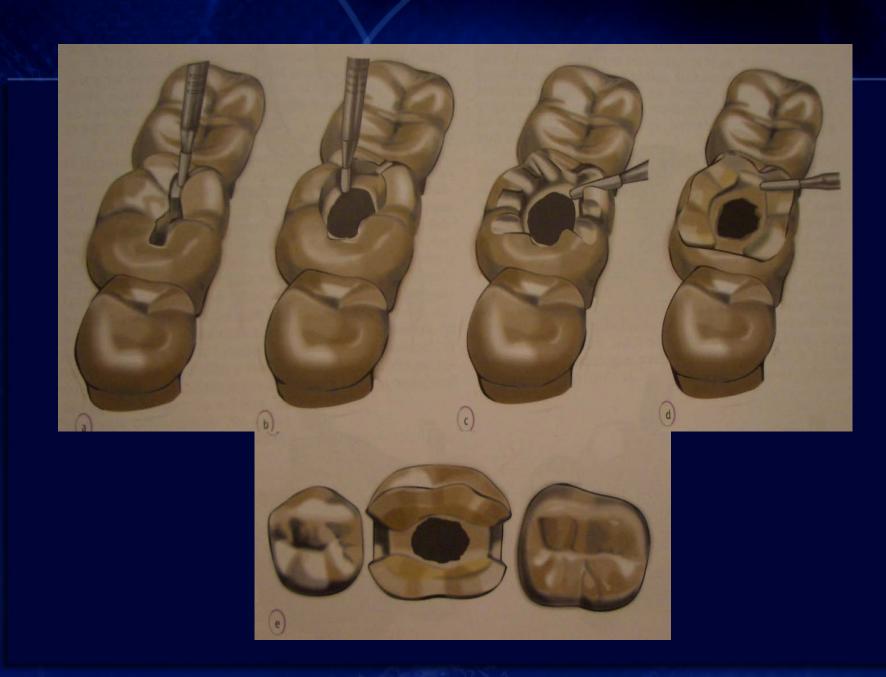




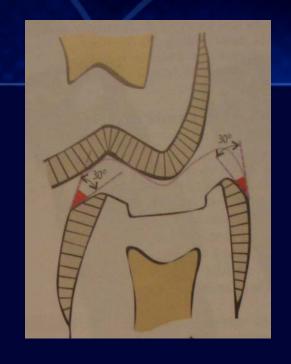




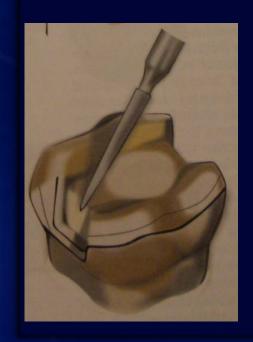




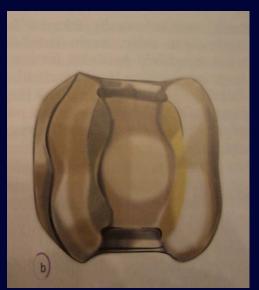


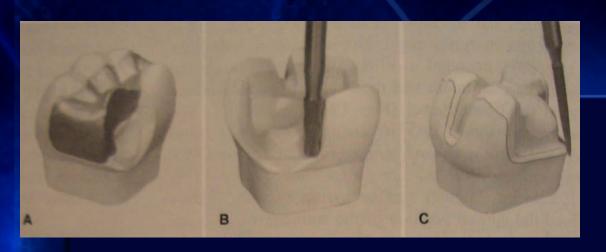


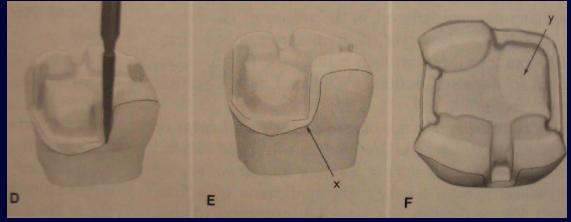


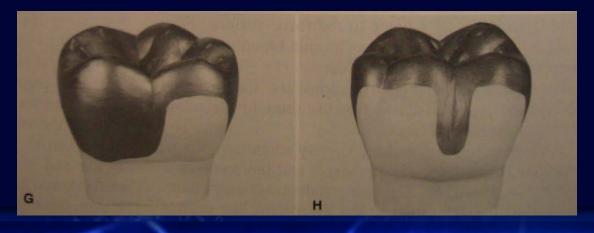


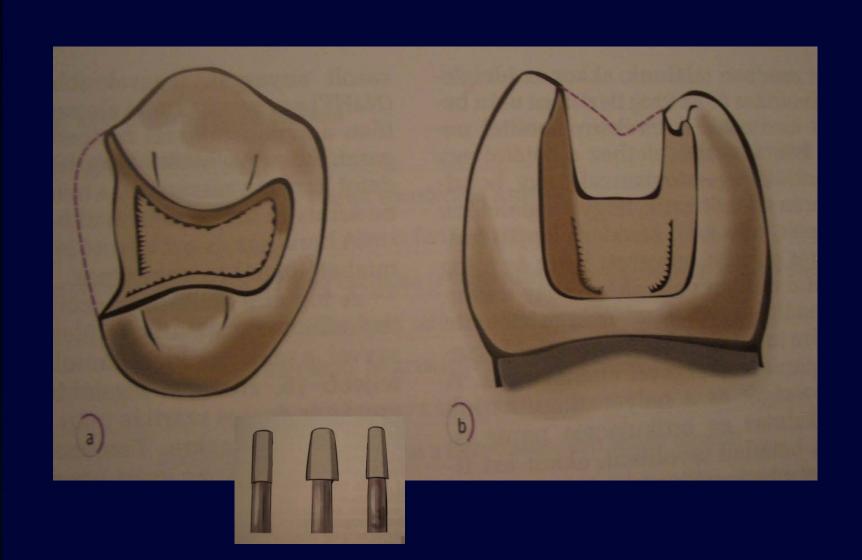


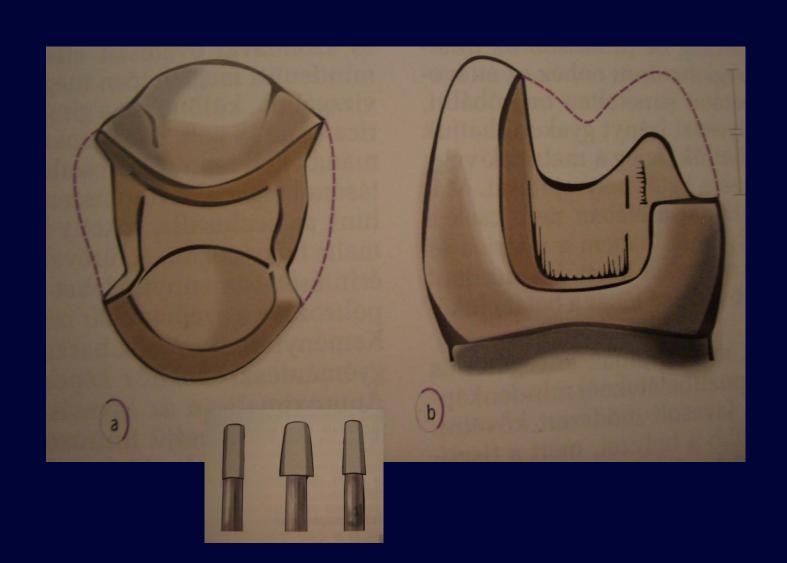












Thank you for your attention!