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
Inlay - onlay

- Metall
- Ceramic
- Glass ceramic
- Direct Ceramic (Cerec)
- Gold ceramic
- Composite
Inlay - onlay

Direct - Indirect

- Metall (gold-, silver-palladium alloy)
- Composite
- Ceramic

Laboratorium - Chair-side Technik

Composite

CAD-CAM
Inlay - onlay

CAD/CAM:

Computer Aided Design

Computer Aided Manufacturing
Cavity preparation for cast metal inlays
Inlay - onlay

- Higher strength 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
Inlay - onlay

INDICATIONS - CONTRAINDICATIONS I.

- Higher strength, 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
Inlay - onlay

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!