

# Plastic fillings

- The material is soft, it is cured (set) in the cavity \_ amalgam, composite, glassionomer, temporaries.

# Rigid fillings - inlays

- The material is rigid (already cured)

Metal alloy, composite, ceramics.

# Inlays

- Rigid fillings
- Manufactured in a dental lab
- Direct or indirect method
  - Direct method rarely
  - Indirect method most common

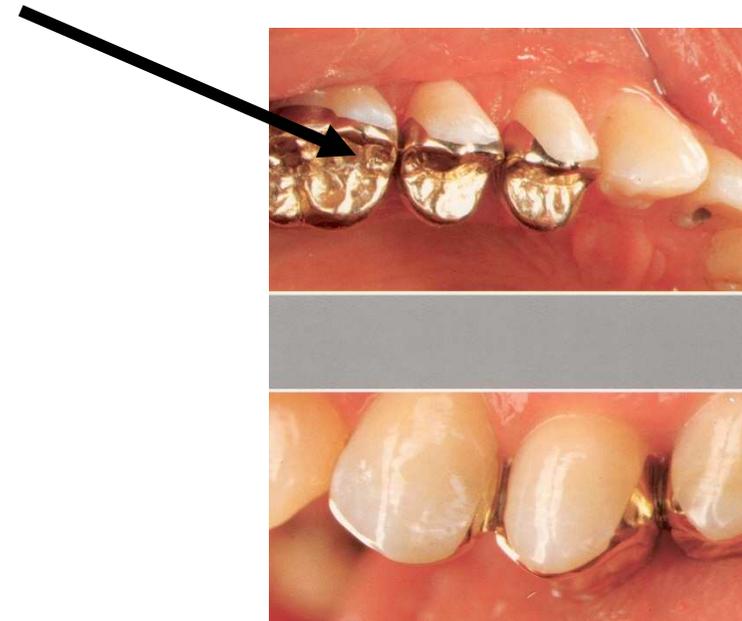
# Inlay

- Crown inlay
  - a part of a clinical crown is replaced
  
- Root canal inlay
  - The inlay is cemented into the root canal and replaces a crown (abutment tooth – stump, snag)

# Crown inlay

## Material

- *Composit*
- *Ceramics*
- *Metal Alloys*



# Crown inlays

## Indications

- A big lost of dental tissues
- Next to the crowns and bridges made of metal alloy

# Crown inlays

## Contra - indication

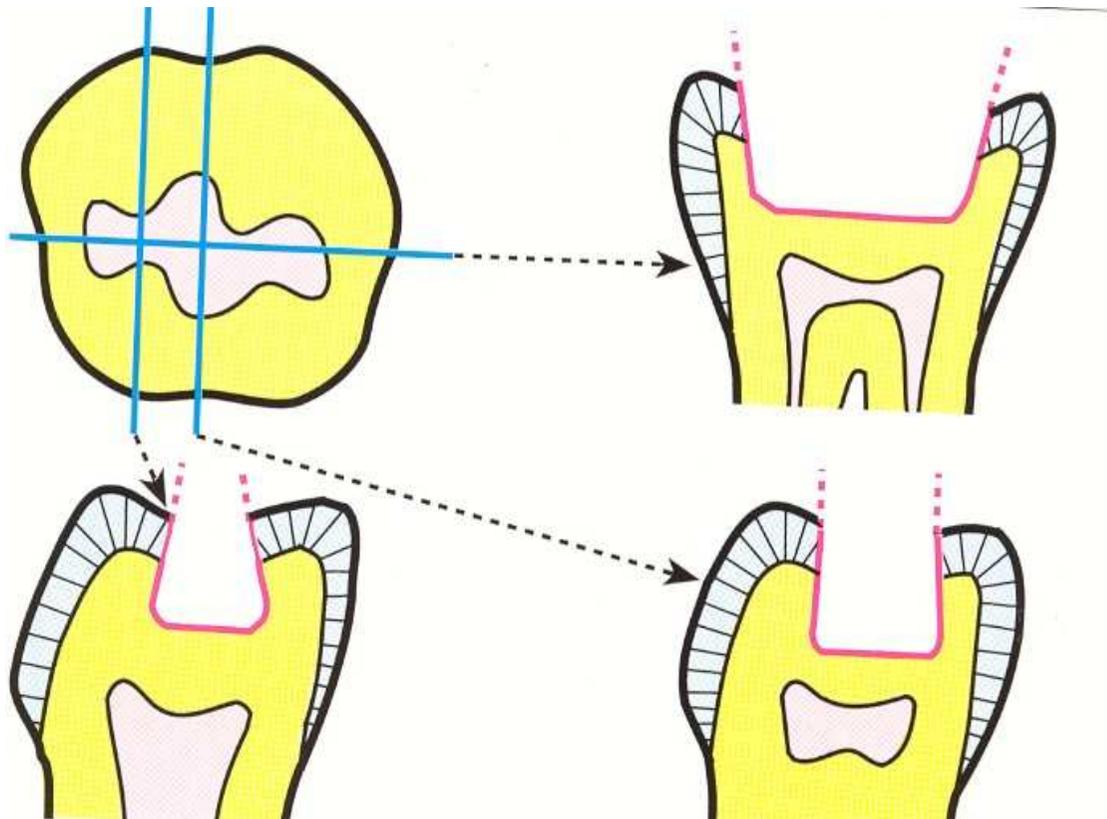
- 1. Too small - shallow (flat) cavities*
- 2. High caries risk*
- 3. Frontal area (metallic)*

# Basic rules of preparation

➤ Box

➤ No undercuts

➤ Light divergence of the walls (facilitating shape). Angle of divergency 6 – 15°



## Box

No undercuts

Simple box

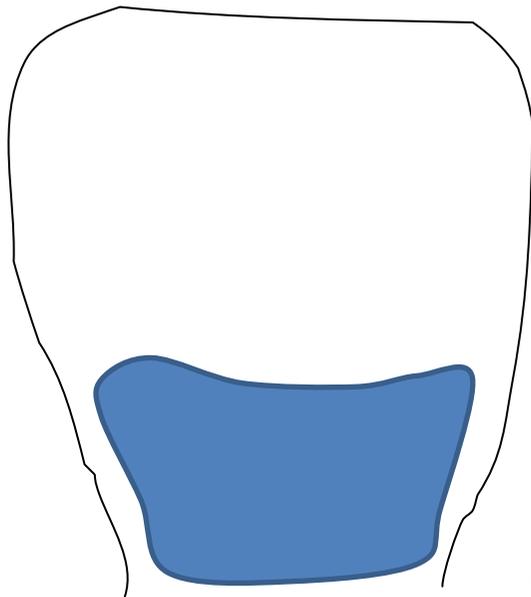
Facilitating form

# Inlay of metal alloy

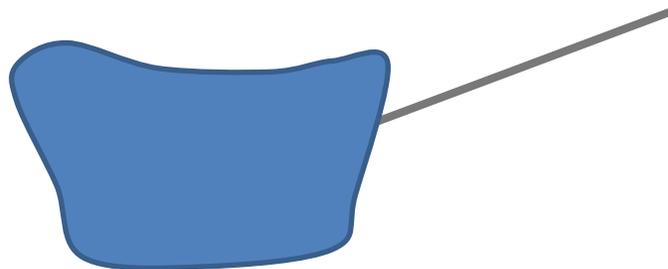
- Direct method
- Indirect method

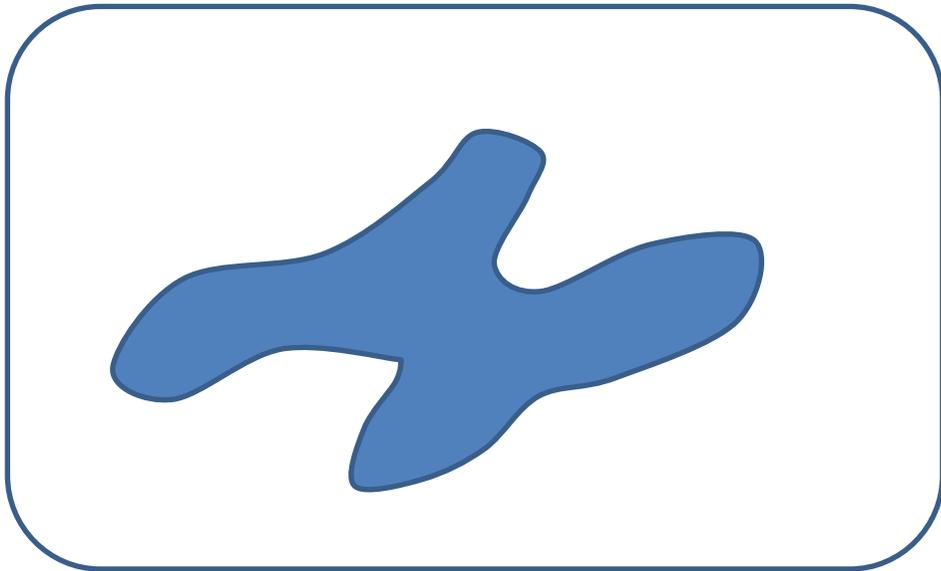
# Inlay of metal alloy

## ➤ Direct method



***Direct modelling in the mouth***  
***Special wax – casting wax,***  
***(special polymers)***  
***Sprue pin***  
***Investment***  
***Method of the lost wax***





Class I.

All fissures are involved

No undercuts – facilitating form

Asymmetric outlines

Depth 1,5 mm

# Sequence of operations

Dental office

- Preparation
- Isolation of the cavity
- Modelling of heated casting wax
- Sprue pin – the thickest part, reservoir

Dental lab

- Investment
- Casting (method of lost wax)
- Finishing

Dental office

- Cementation

# Inlay of metal alloy

## Indirect method

Taking of the impression

Model

Modellation of the casting wax,  
(special polymers)

Sprue pin

Investment

Lost wax method