

Mesio-structures, hybrid prosthesis and overdentures on implants

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Previous lecture:

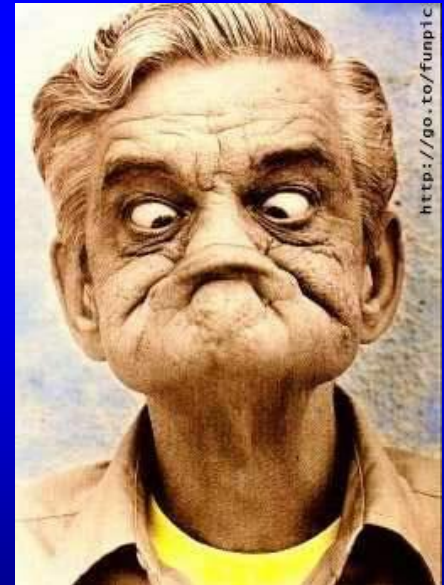
Totally edentulous jaws

Conventional therapy:

Removable denture

Implant therapy:

- Implant retained ,/supported/
overdenture
- Fixed hybrid prosthesis
- Implant supported prosthesis



Totally edentulous jaws

Conventional therapy:
Removable denture



Implant therapy:

- Implant retained ,/supported/
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- Fixed hybrid prosthesis
- Implant supported prosthesis

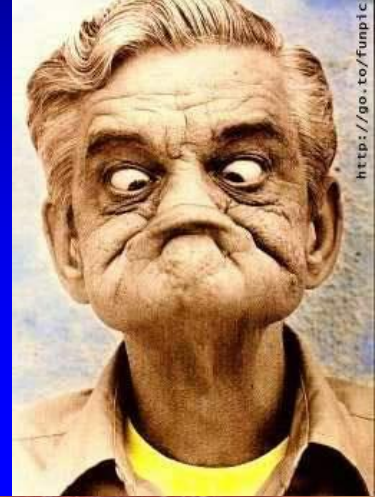


Totally edentulous jaws

Conventional therapy:
Removable denture

Implant therapy:

- Implant retained ,/supported/
overdenture
- Fixed hybrid prosthesis
- Implant supported prosthesis



Hybrid prosthesis

- Fixed-removable, or maxillofacial prosthesis designed and fabricated with an atypical combination of materials or structural components

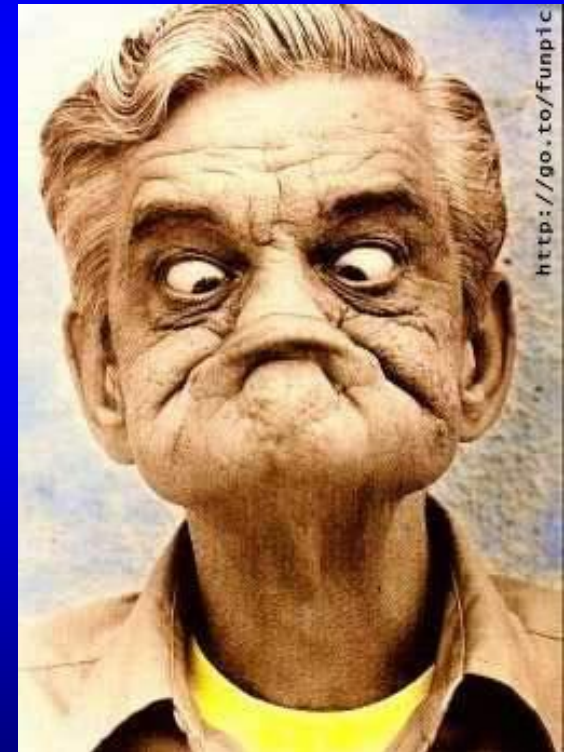
/Laney W.R. edit. Glossary of Oral and Maxillofacial Implants/

Totally edentulous jaws

Conventional therapy:
Removable denture

Implant therapy:

- Implant retained ,/supported/
overdenture



Implant overdenture

- Complete or partial *removable* prosthesis that covers and is supported by dental implants, individual or splinted, and related tissue structures.

/mucosa/

/Laney W.R. edit. Glossary of Oral and Maxillofacial Implants/

Types of implant restorations

Fixed partial denture/FPD/

(the way of fixation)

cementation

screw

(support)

tooth+implant

implant

Non-removable /hybrid prosthesis/

Removable /overdenture/

(support, retention)

implant

mucosa

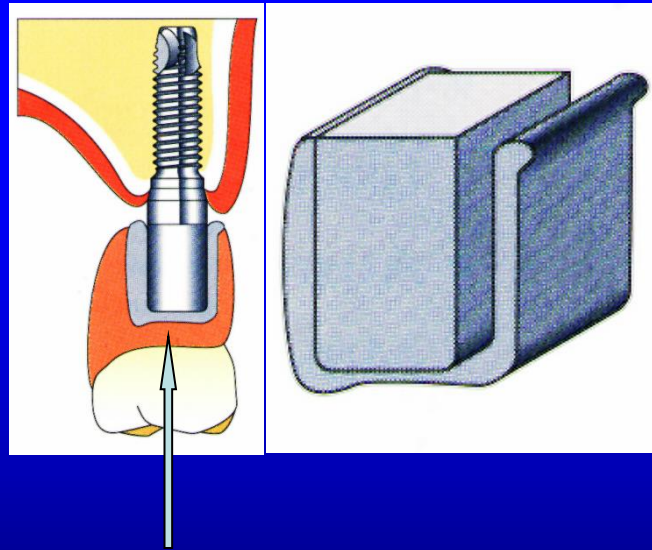
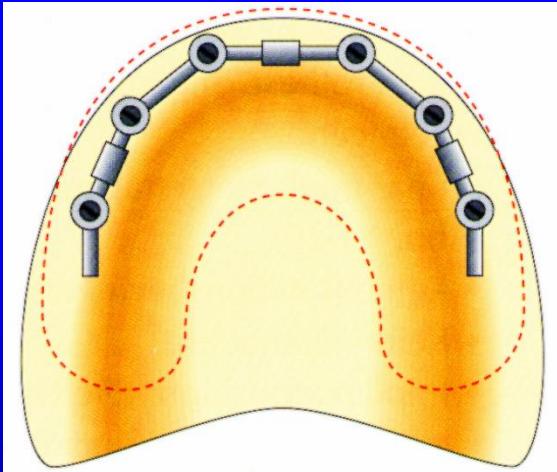
implant + mucosa

The nomenclature of implant prosthesis

/Koeck, Wagner: Implantologie/

- **substructure /implant abutments/**
- **mesiostructure /bar/**
- **suprastructure /prosthesis/**

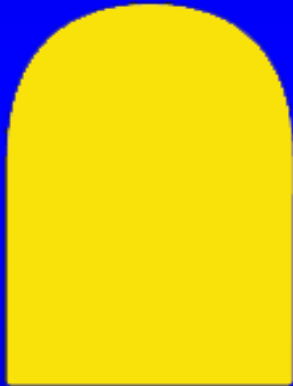
Bar-construction as mesiostructure



Egg-shaped Dolder® Bar



Bar attachment



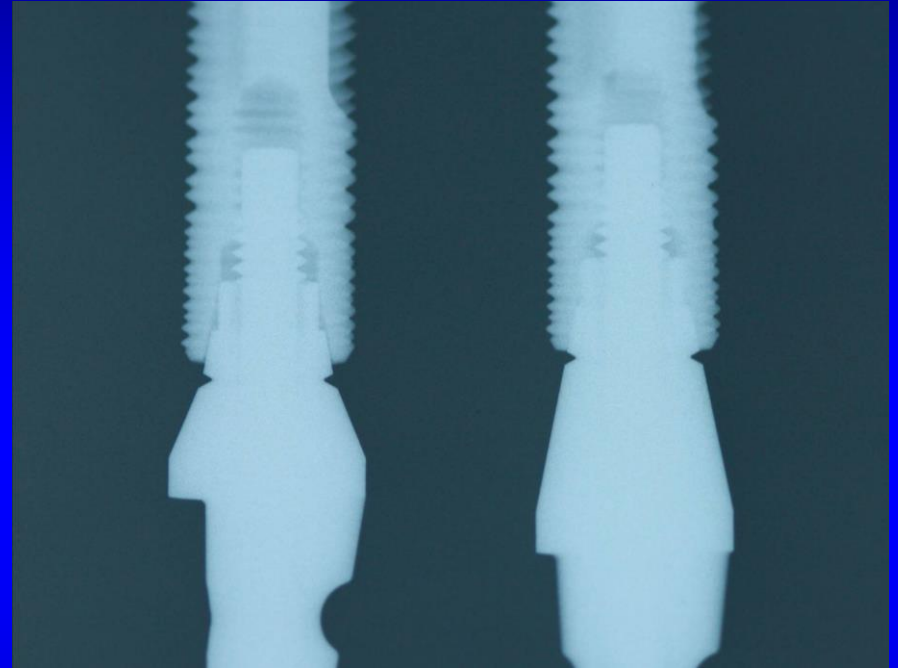
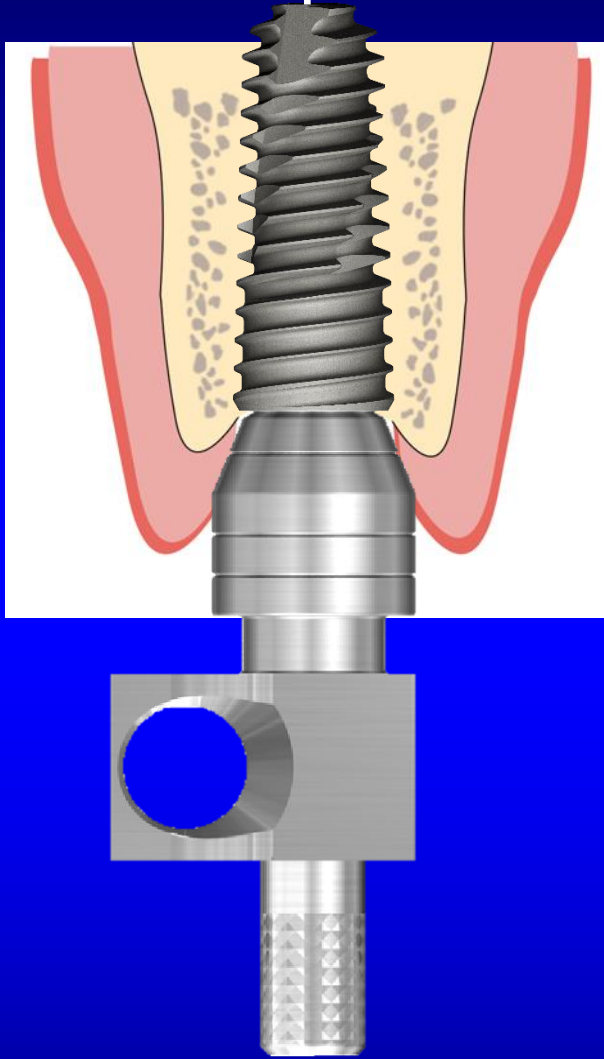
Repetition:

Impression taking:open tray

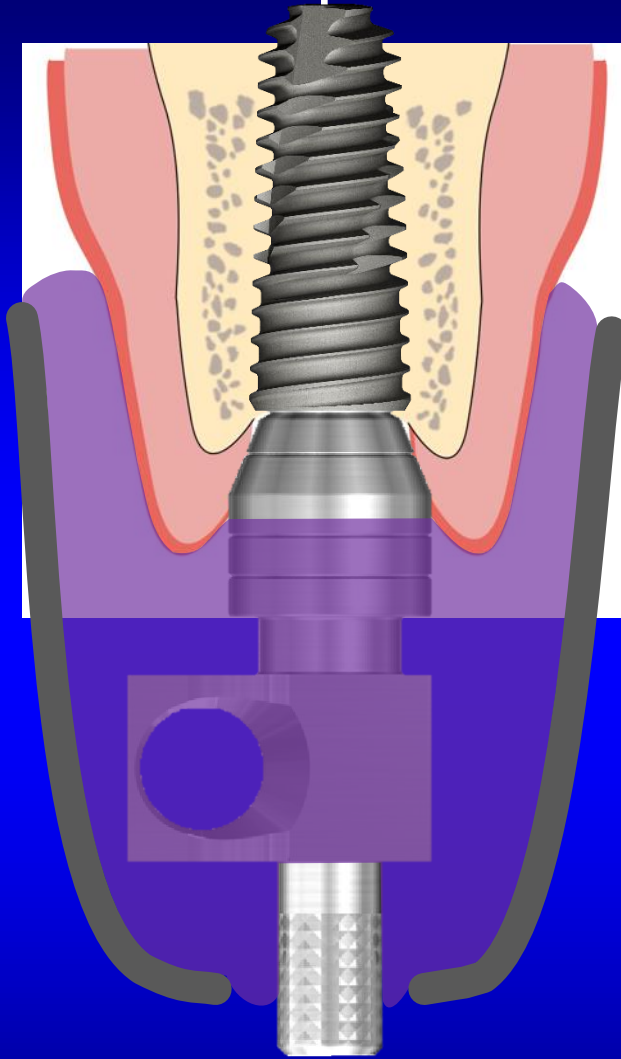
When using an open impression tray method?

- When the implants are not so parallel to each other
- Cement retained restorations on 4 or more implants
- Screw retained restoration on 3 or more implants
- In case of a bar type implant overdenture

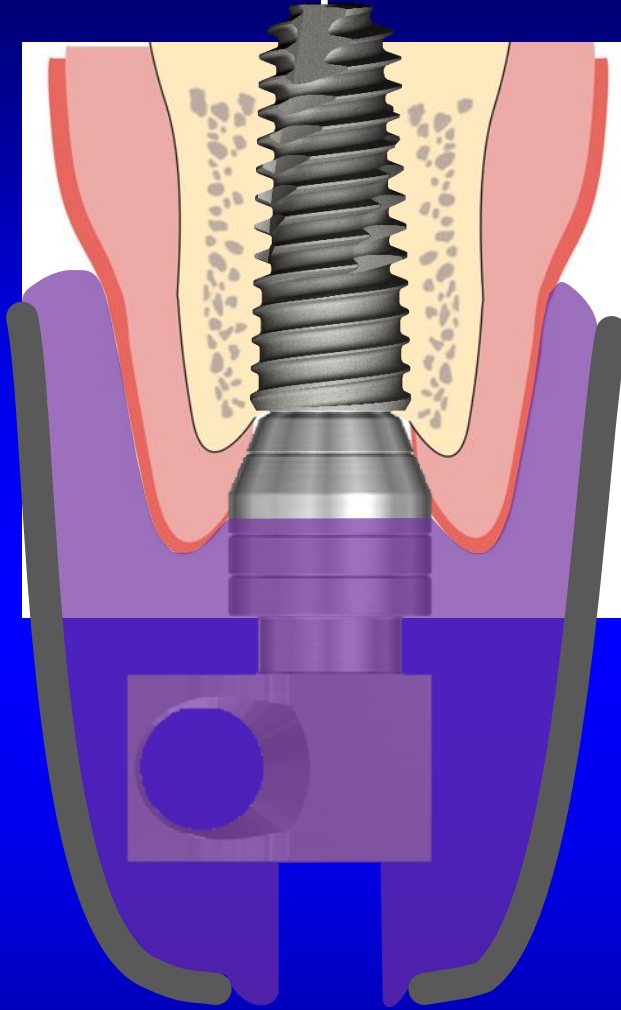
How to use implant level – open tray



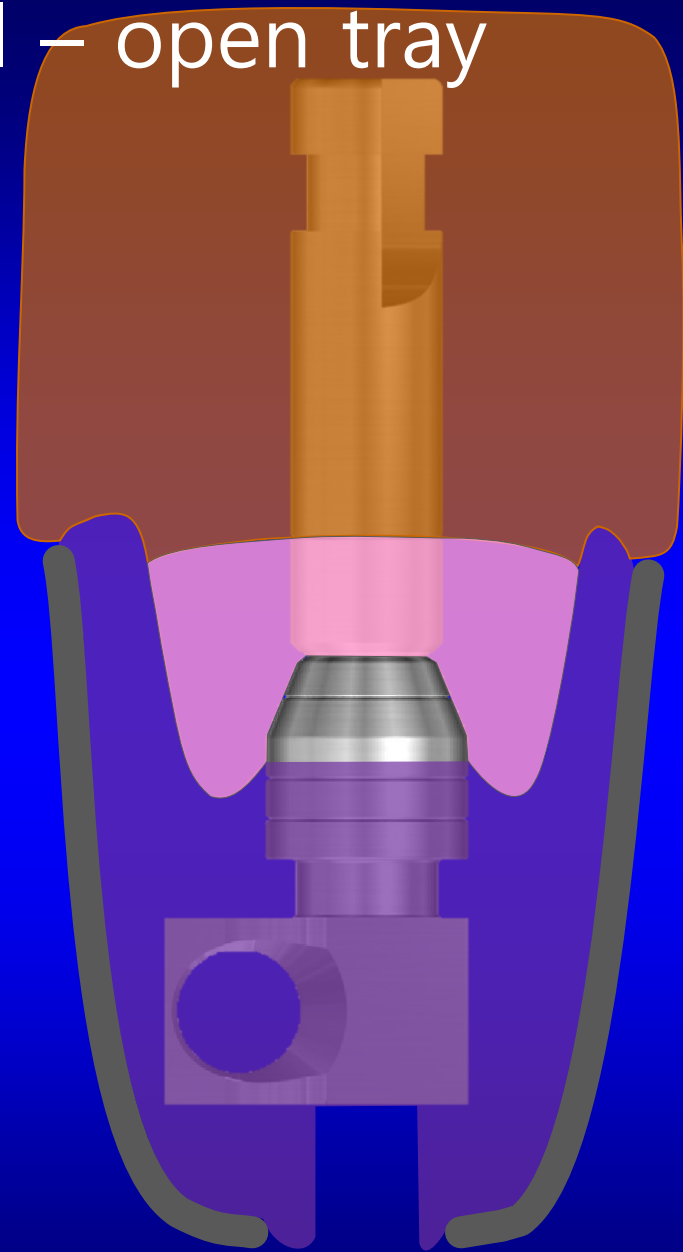
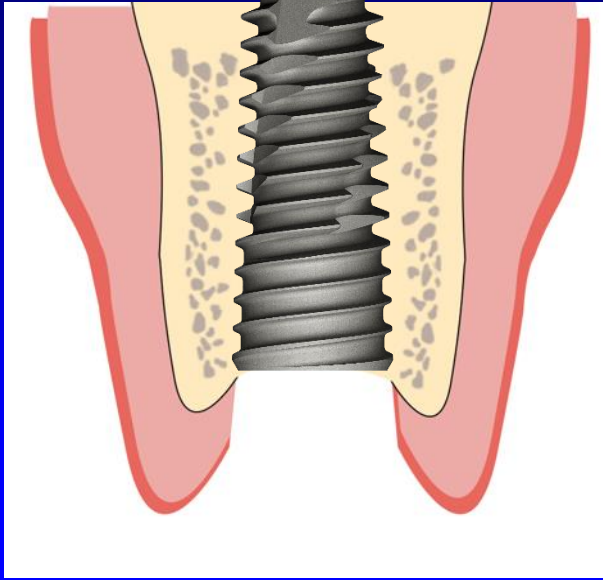
How to use implant level – open tray



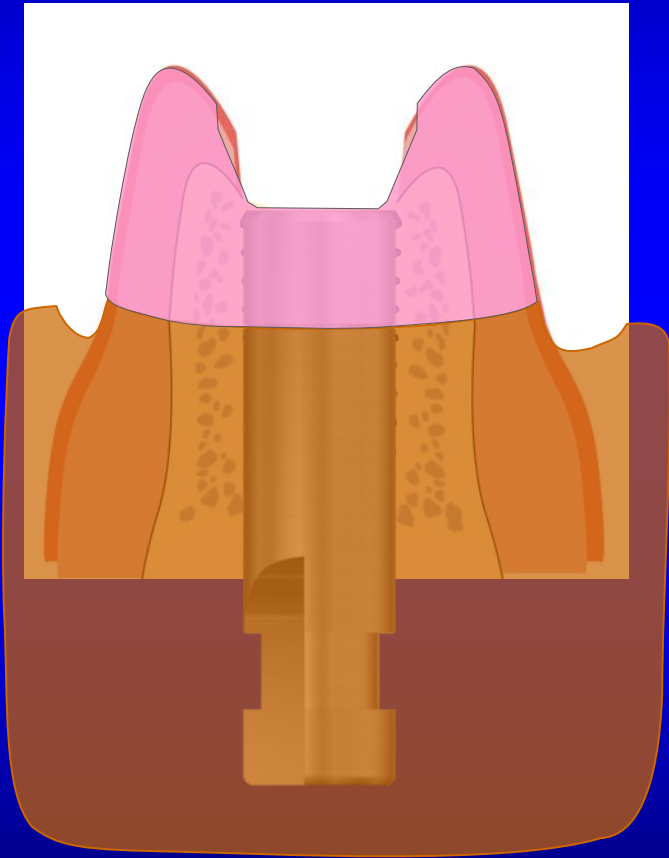
How to use implant level – open tray



How to use implant level – open tray



How to use implant level – open tray



Types of implant restorations

Fixed partial denture/FPD/

(the way of fixation)

cementation

screw

(support)

tooth+implant

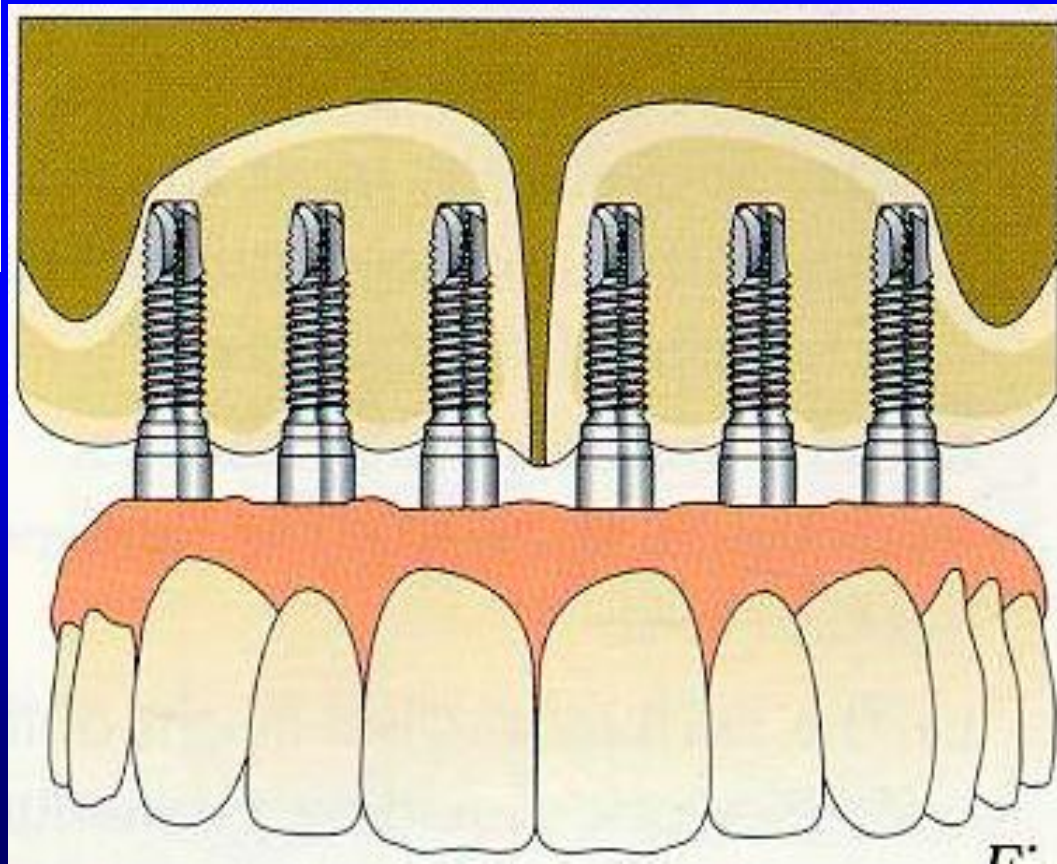
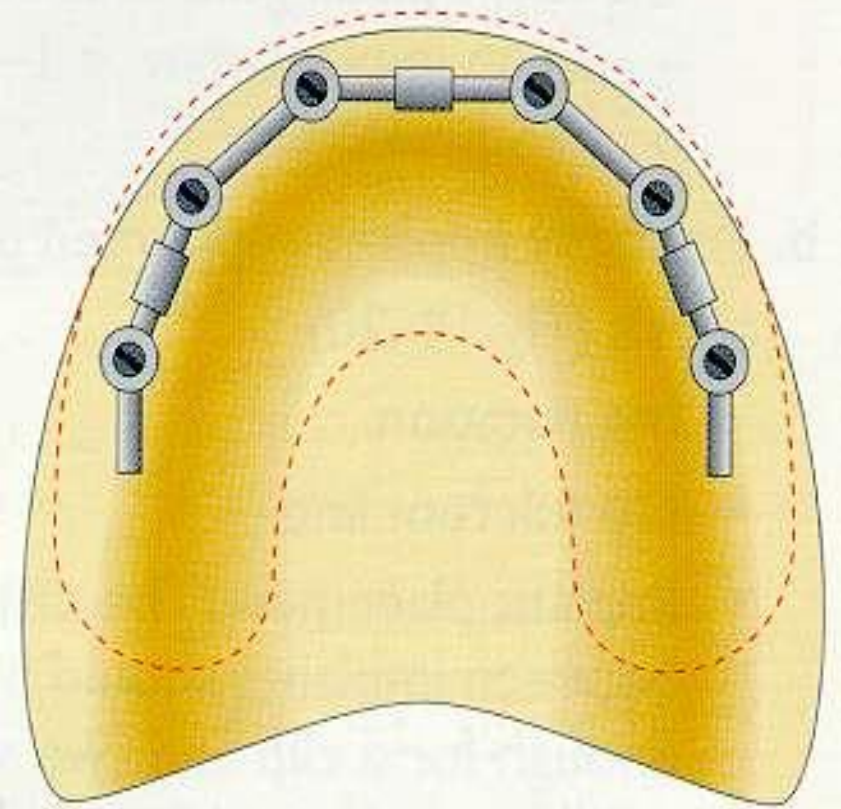
implant

Removable /overdenture/

(support, retention)

implant

Implant supported and retained overdenture





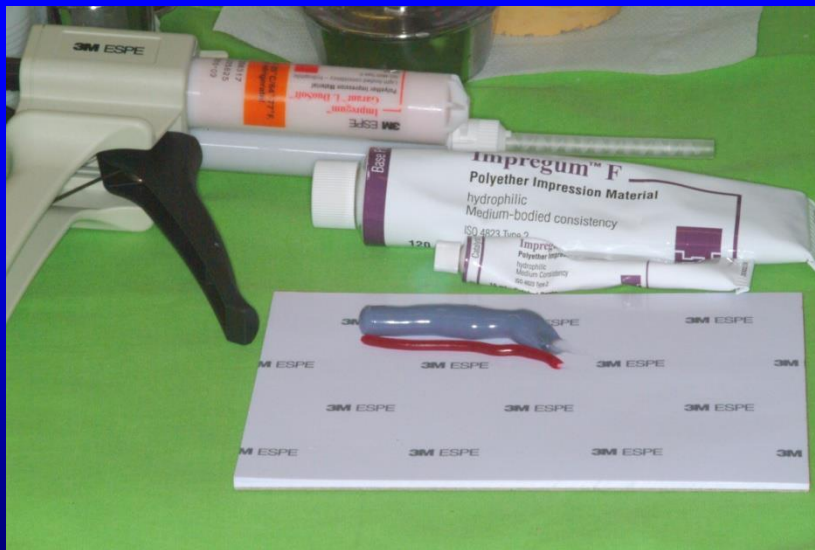
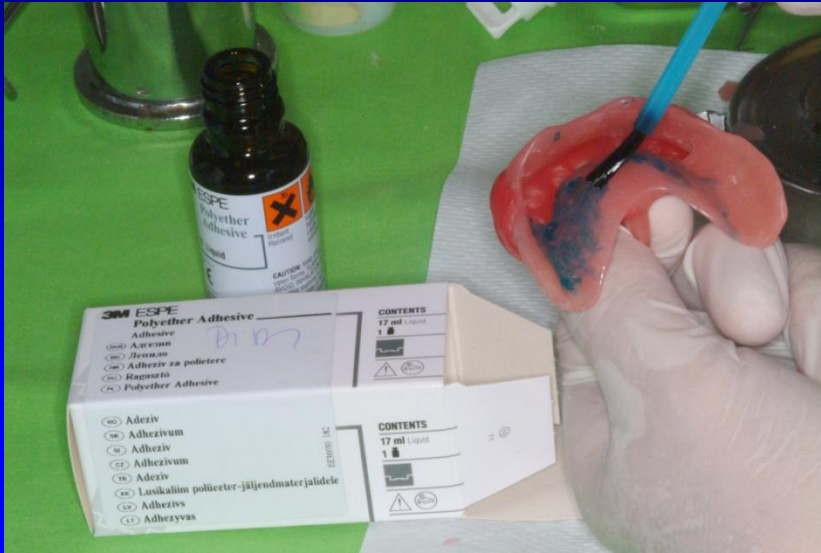
Implants with
impression copings

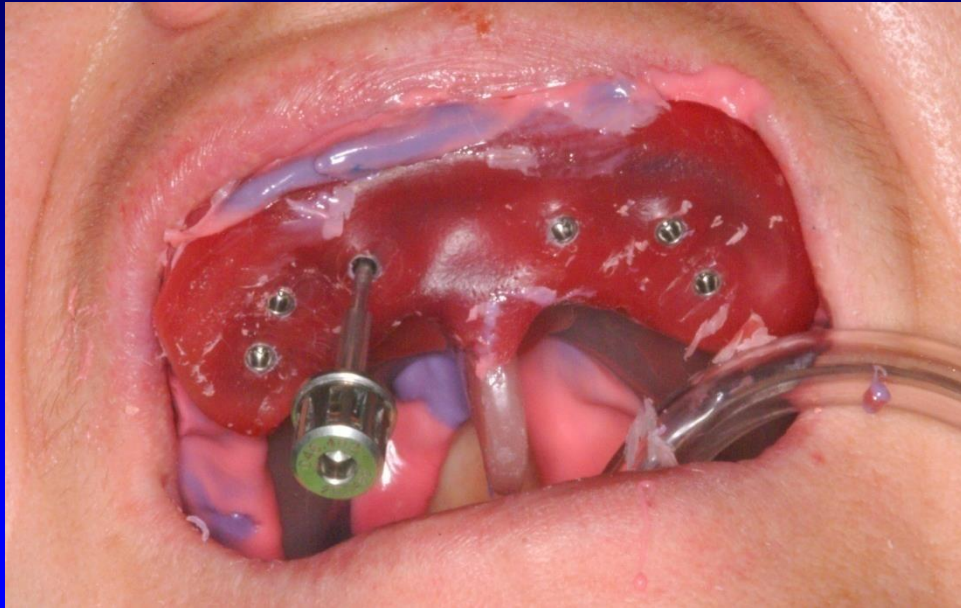


Splinting the copings and preparation for impression



Impression taking





Releasing the copings
from the implants



Bite registration, completing the metal base of denture





Ready made overdenture





Denture
in the mouth





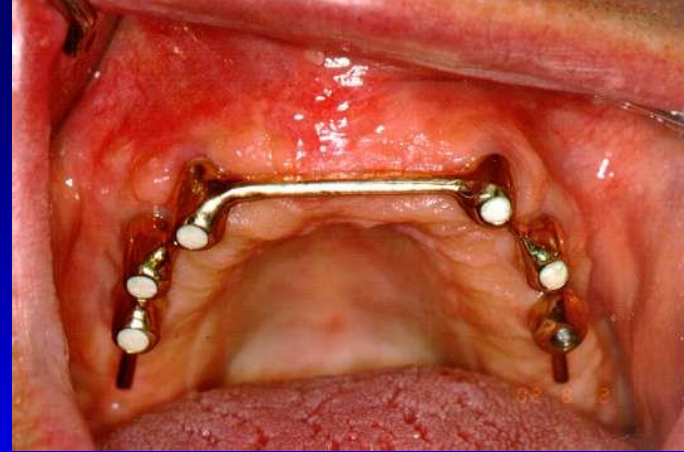
Without denture



With denture



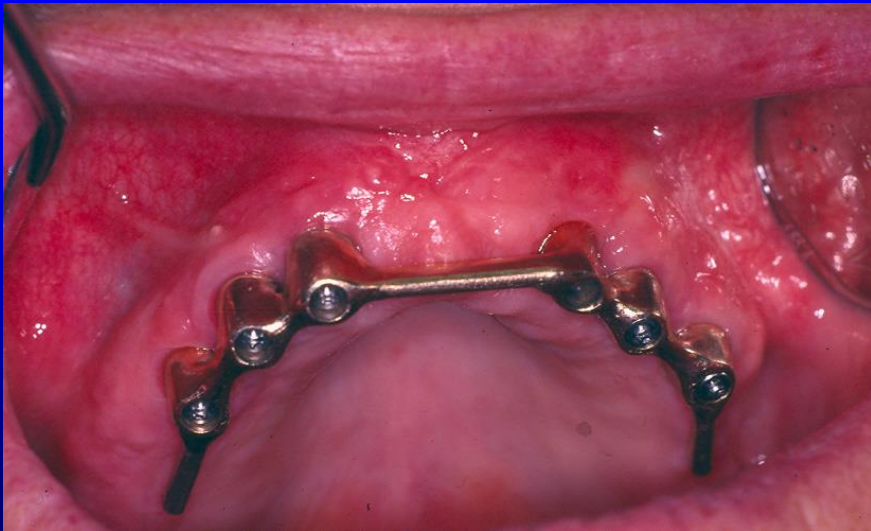
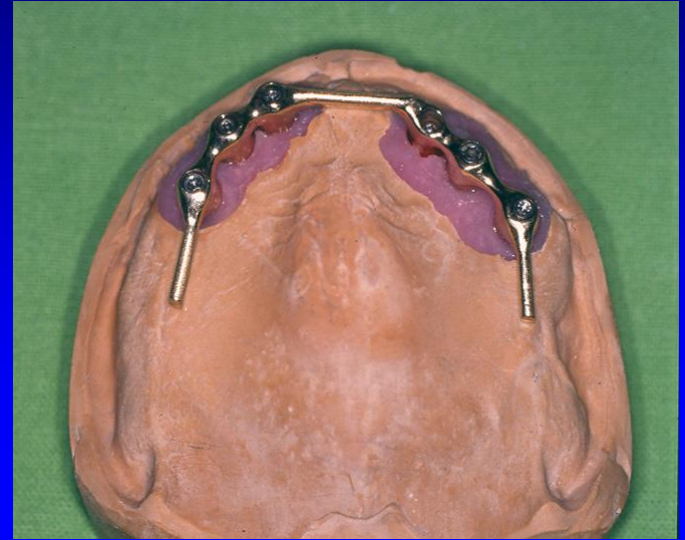
Without
denture



With
denture



Implant supported and retained overdenture



Implant supported and retained overdenture



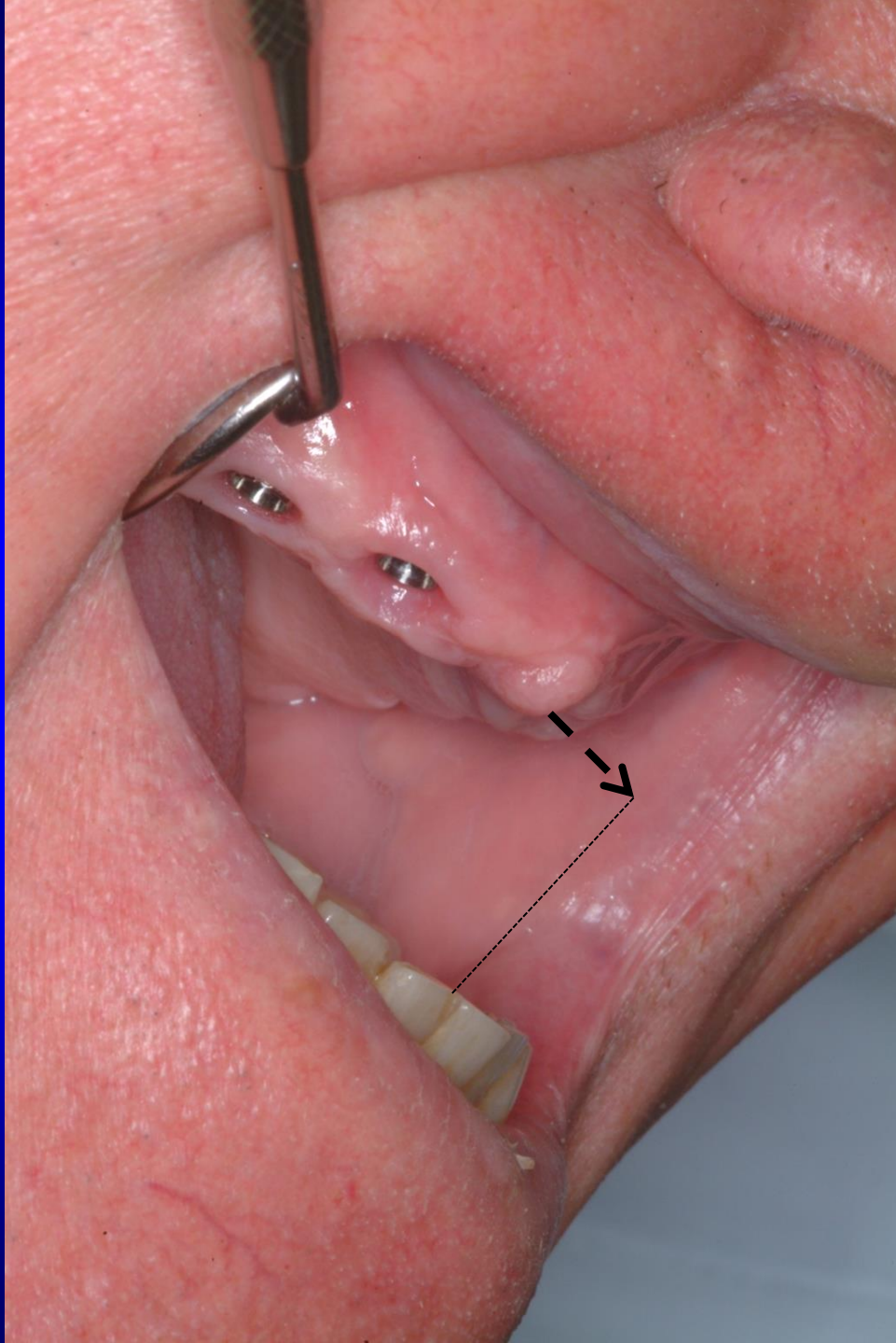
Changes of the labial contour



- **Without denture**

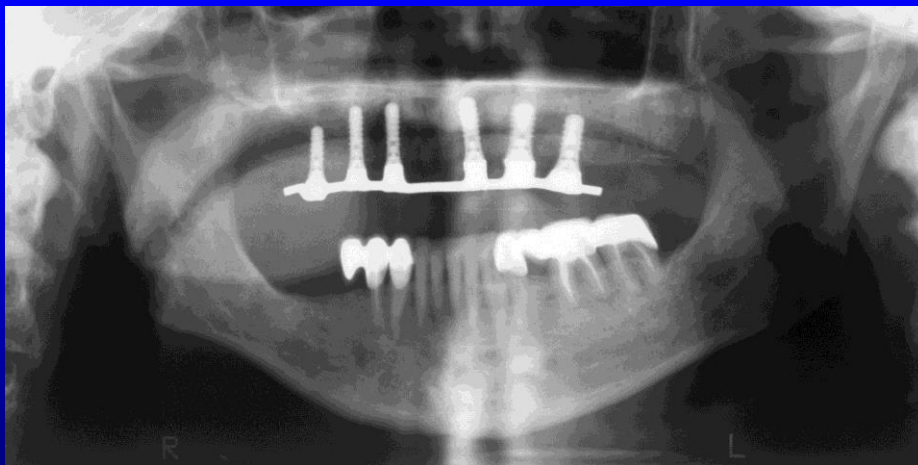
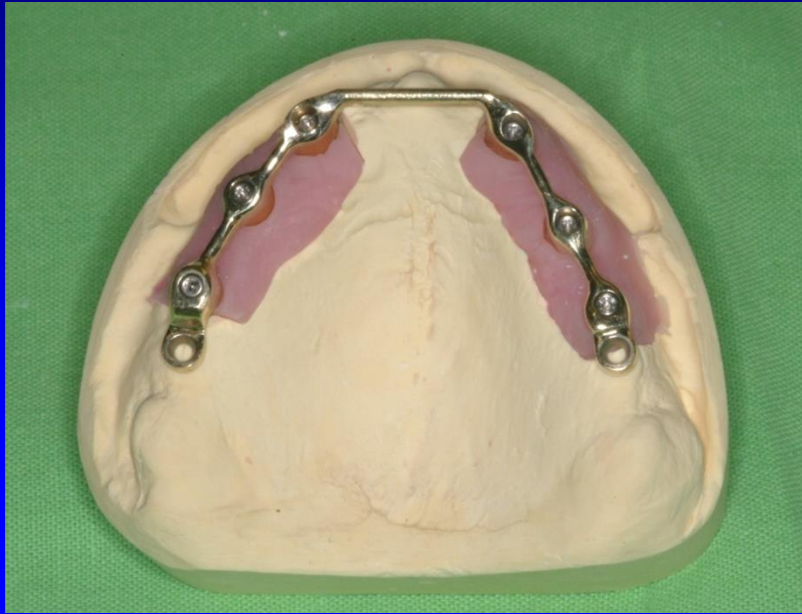


- **With denture**

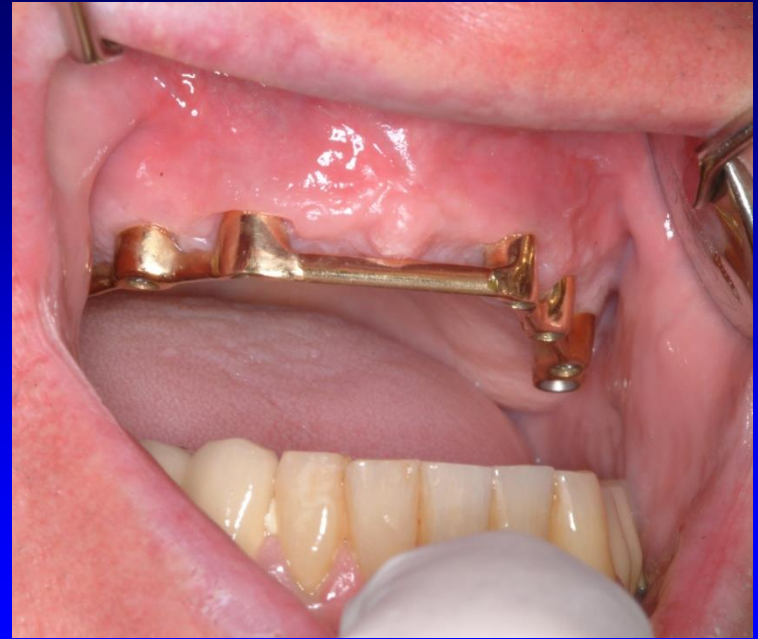


Extreme mandibular protrusion

Implant supported and retained overdenture



Without
denture



With
denture



Types of implant restorations

Fixed partial denture/FPD/

(the way of fixation)

cementation

screw

(support)

tooth+implant

implant

Removable /overdenture/

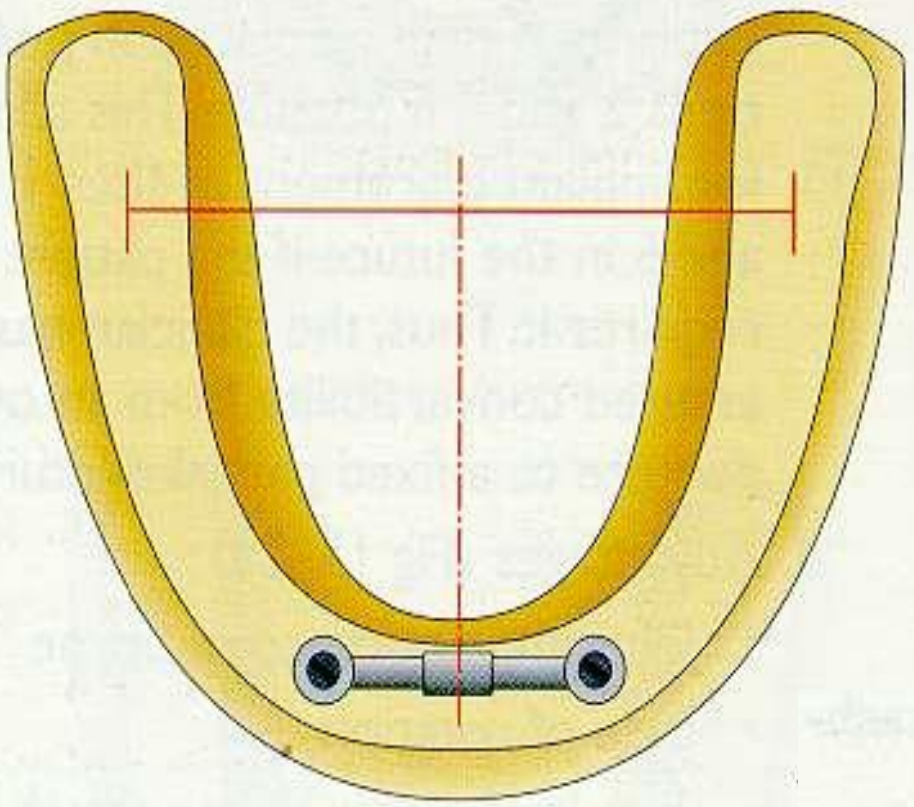
(support, retention)

implant

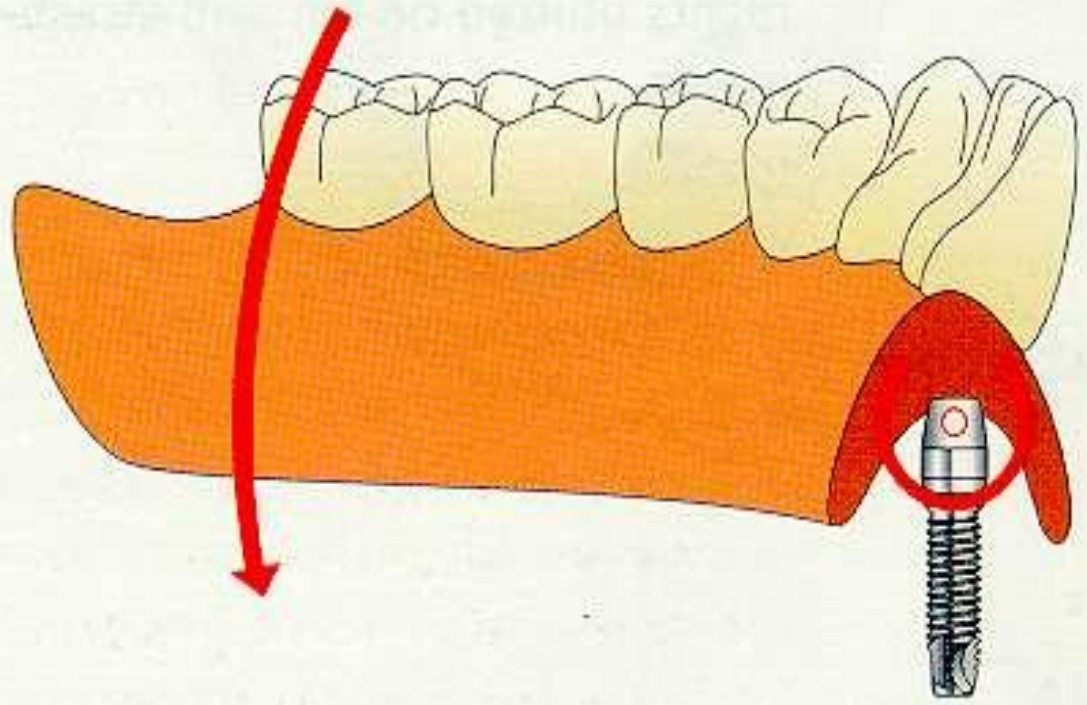
implant + mucosa

Bar retained, implant and mucosa supported overdenture





**Implant retained,
implant + mucosa
supported overdenture**

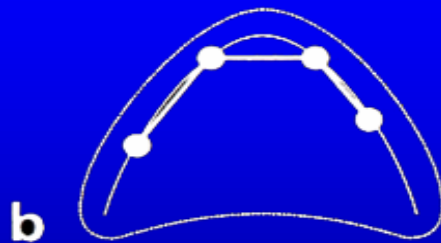
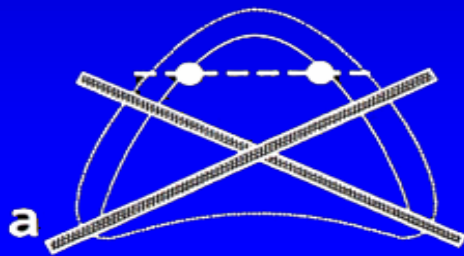


Bar retained, implant-mucosa supported overdenture

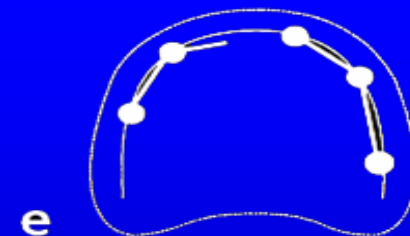
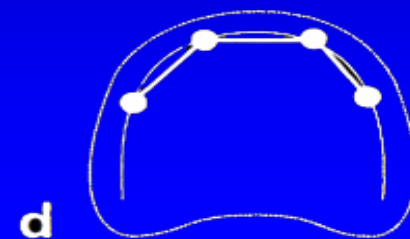


Planning implant position / distribution /

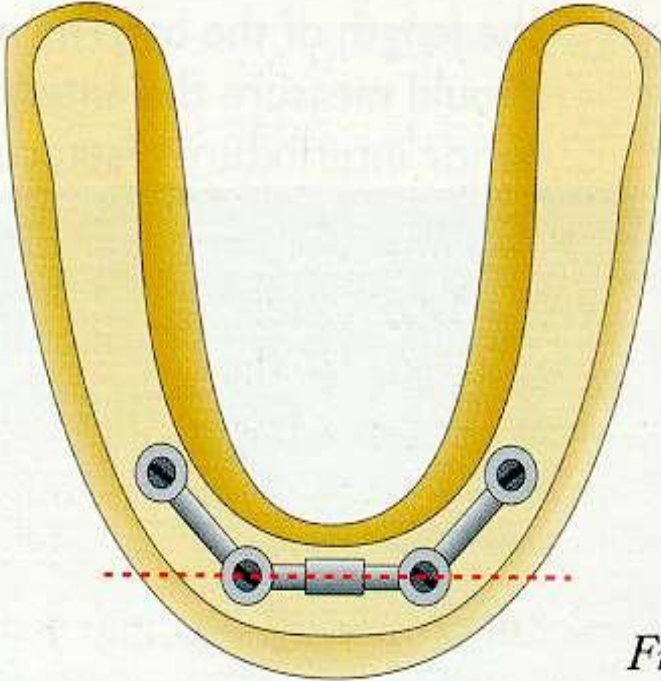
V - shaped



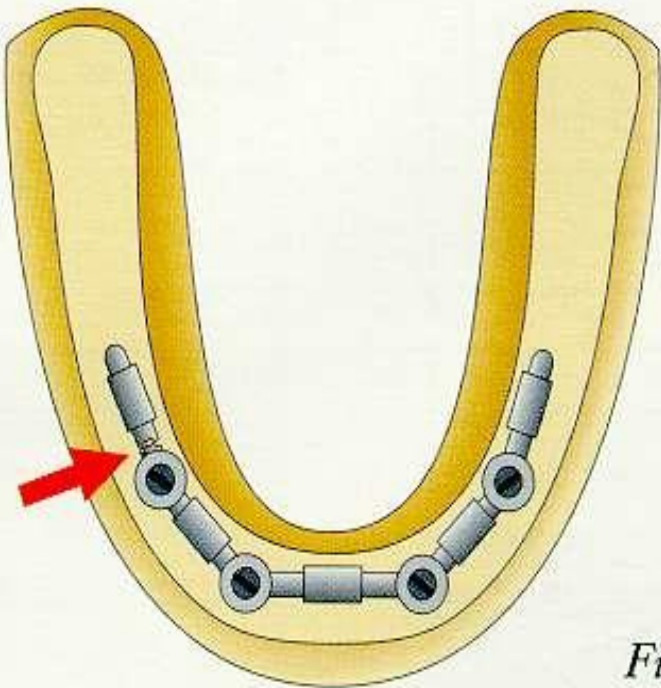
U - shaped



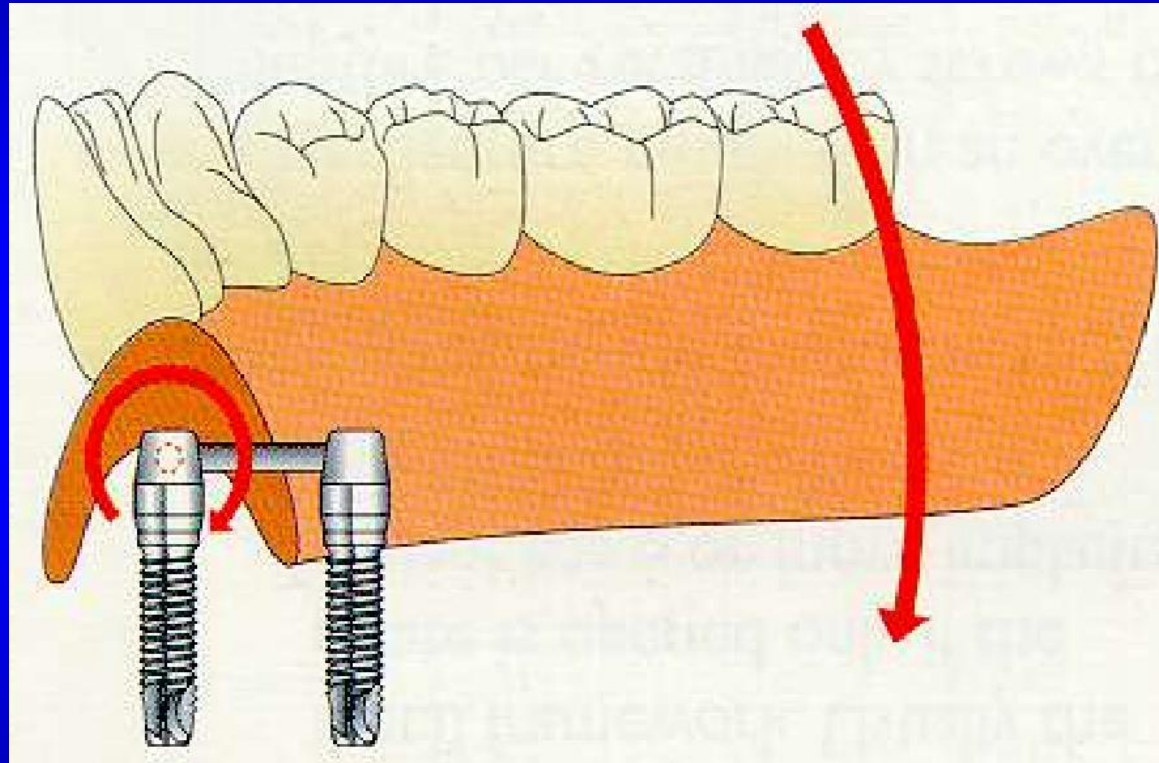
Free movement of the distal saddle of the overdenture



Fig



Fig



Matrix placement



1-3 degrees
of space freedom

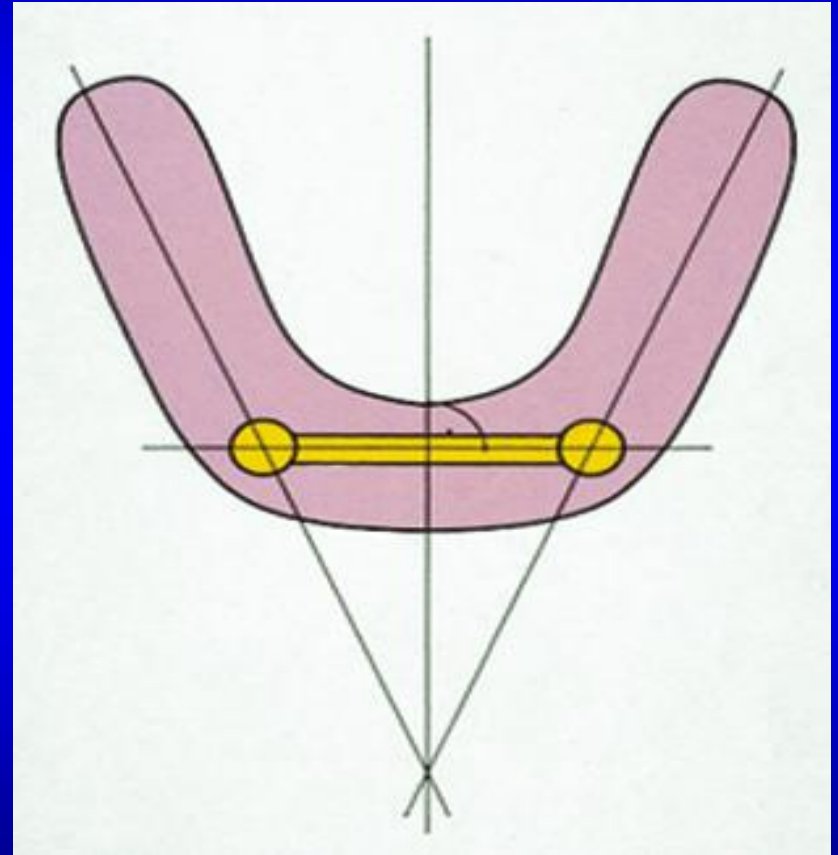
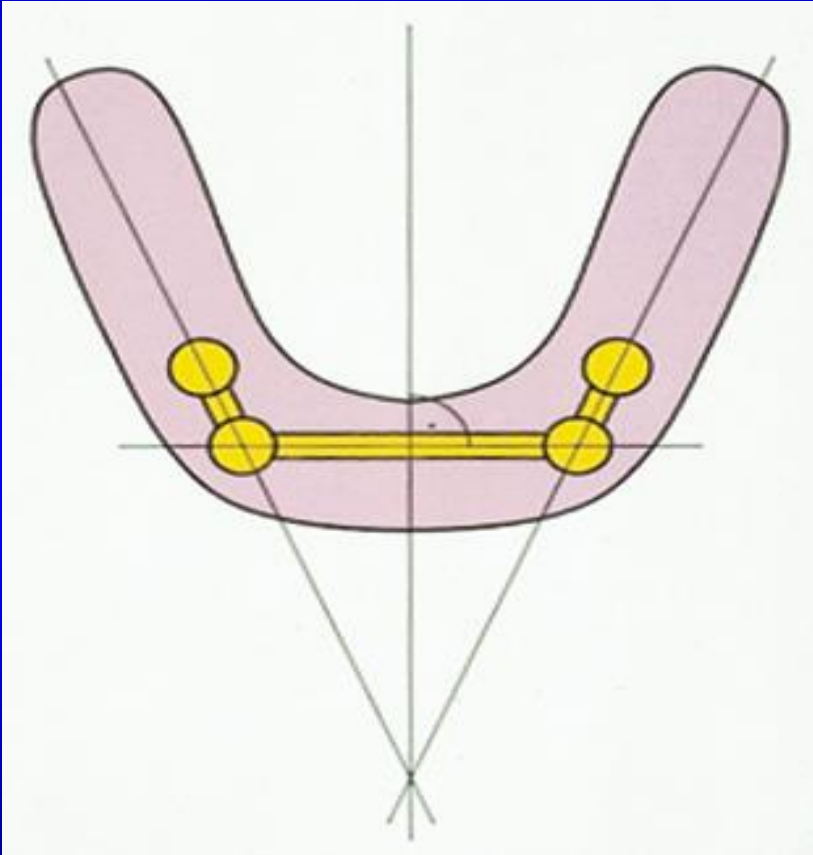
No degrees
of space freedom



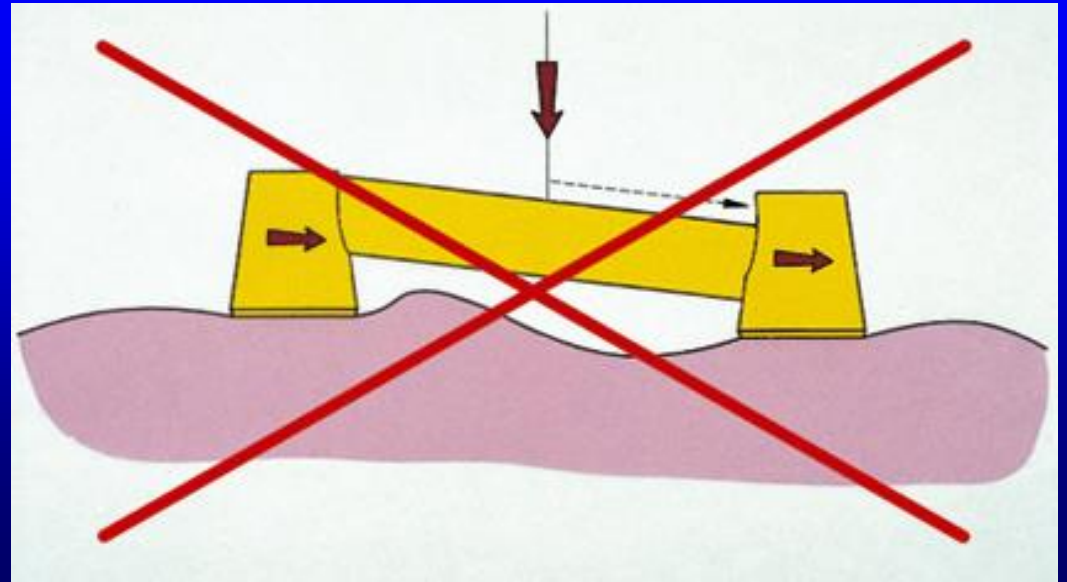
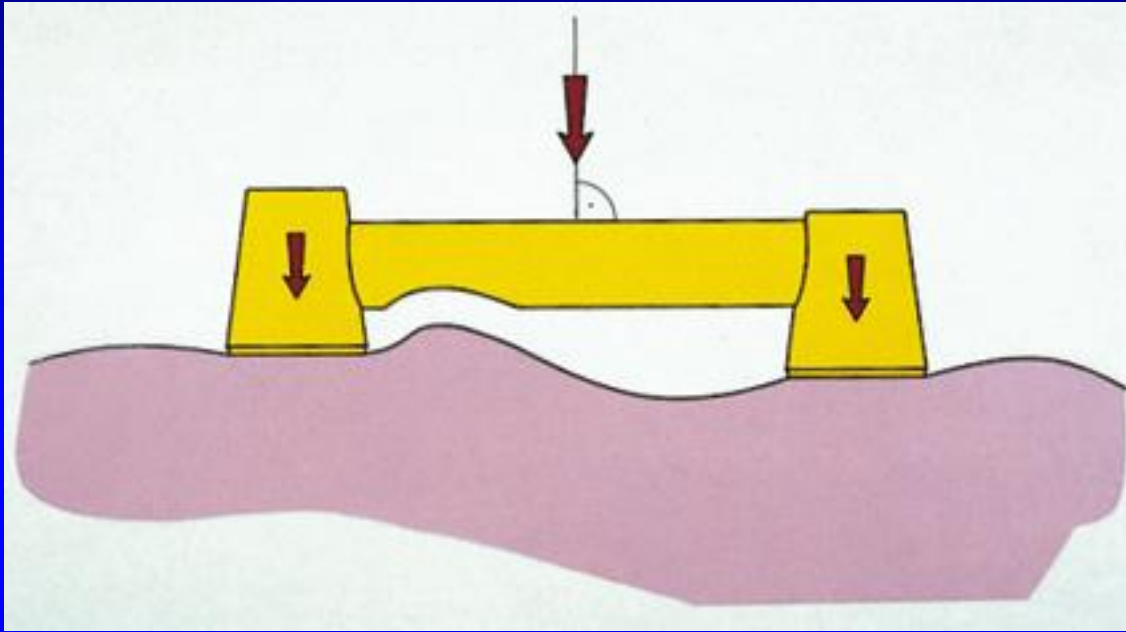
Bar matrix positioning



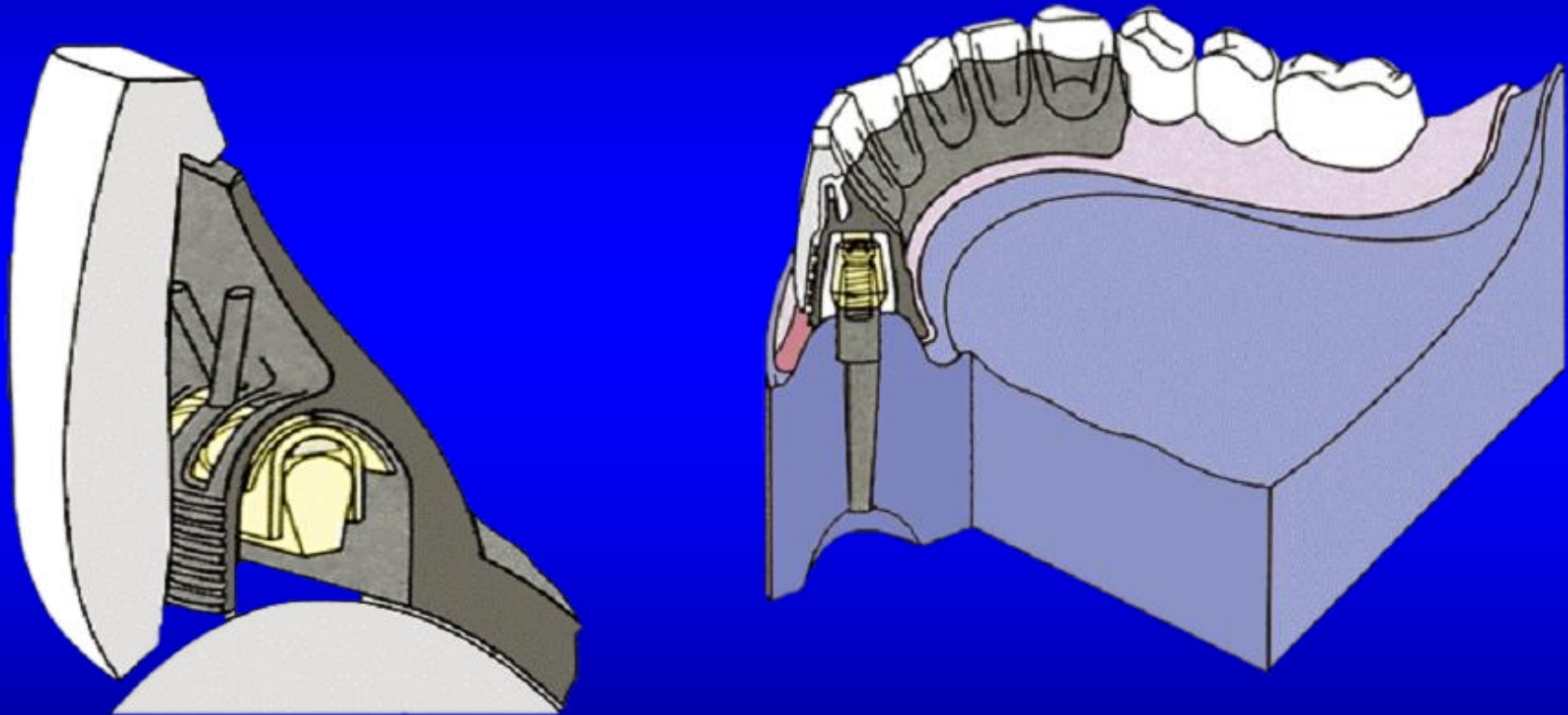
Bar positioning



Bar positioning



Metal reinforcement







Types of implant restorations

Fixed partial denture/FPD/

(the way of fixation)

cementation

screw

(support)

tooth+implant

implant

Removable /overdenture/

(retention, support,)

implant

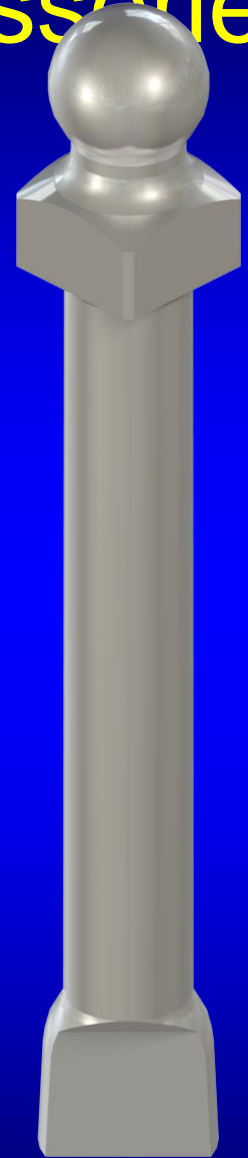
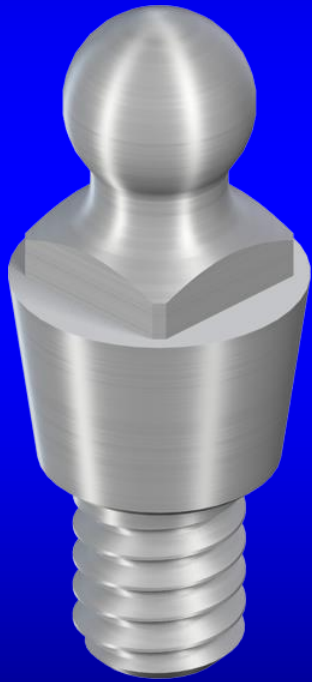
mucosa

Implant retained, mucosa supported overdenture

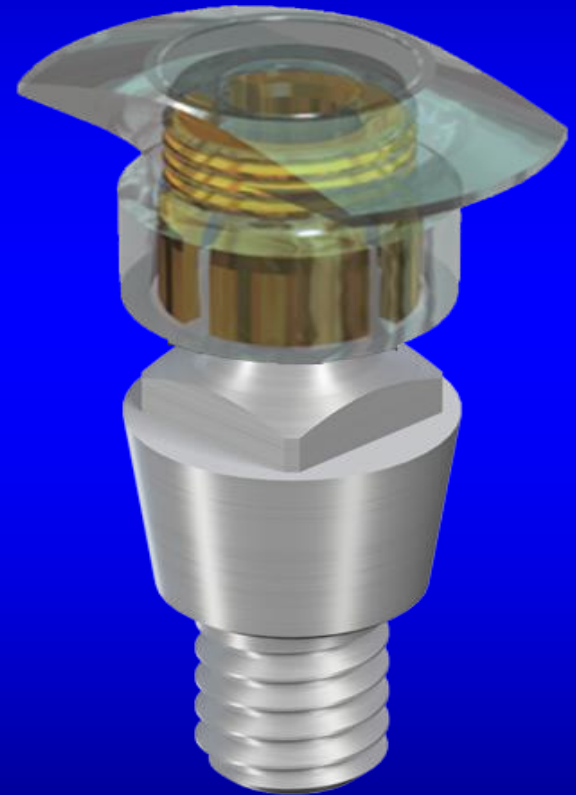
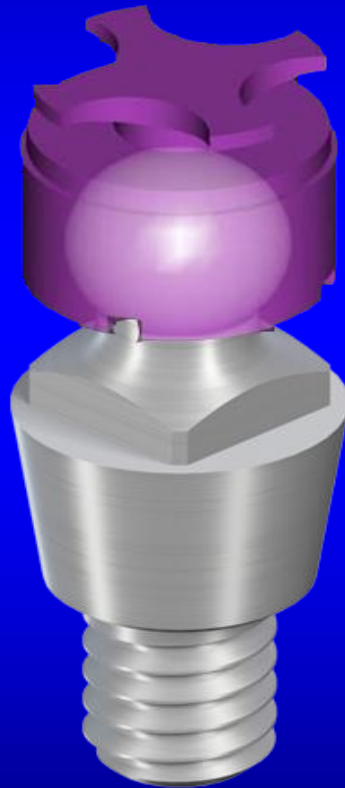
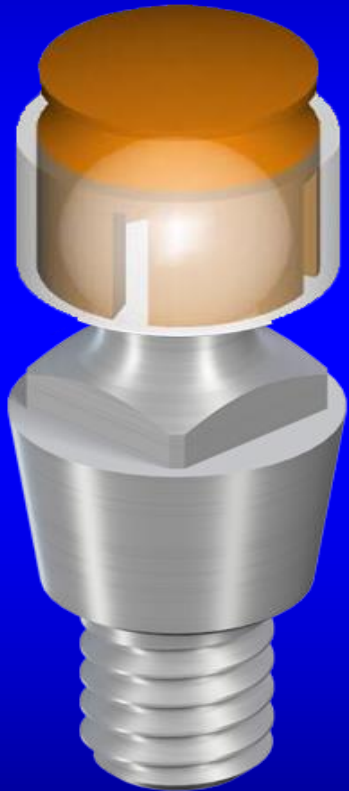




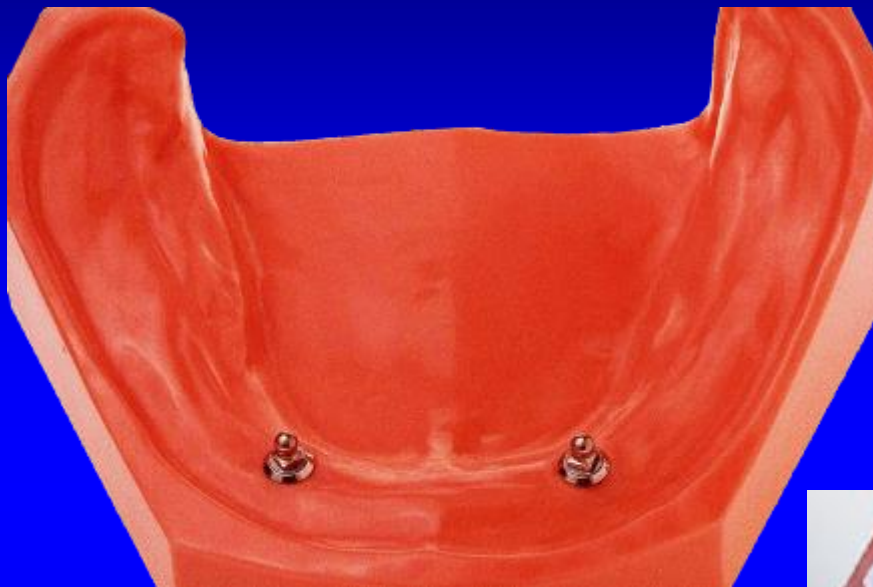
O-ring attachment with accessories



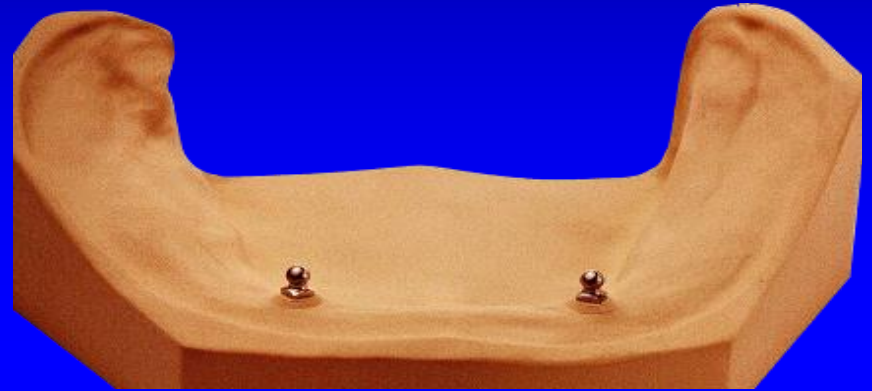
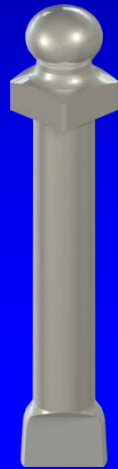
Matrixes



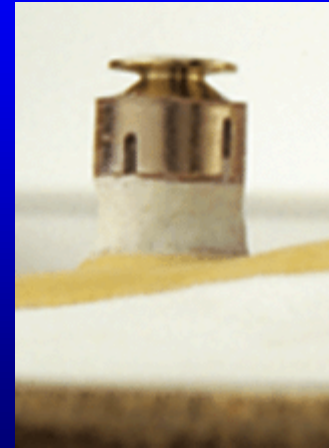
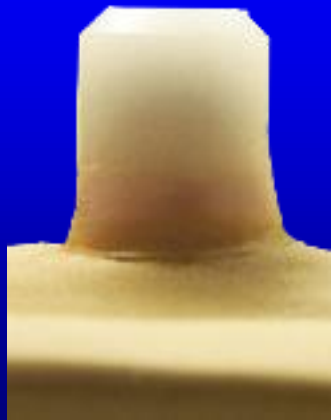
Impression-taking



Model processing



Matrix positioning



Metal reinforcement



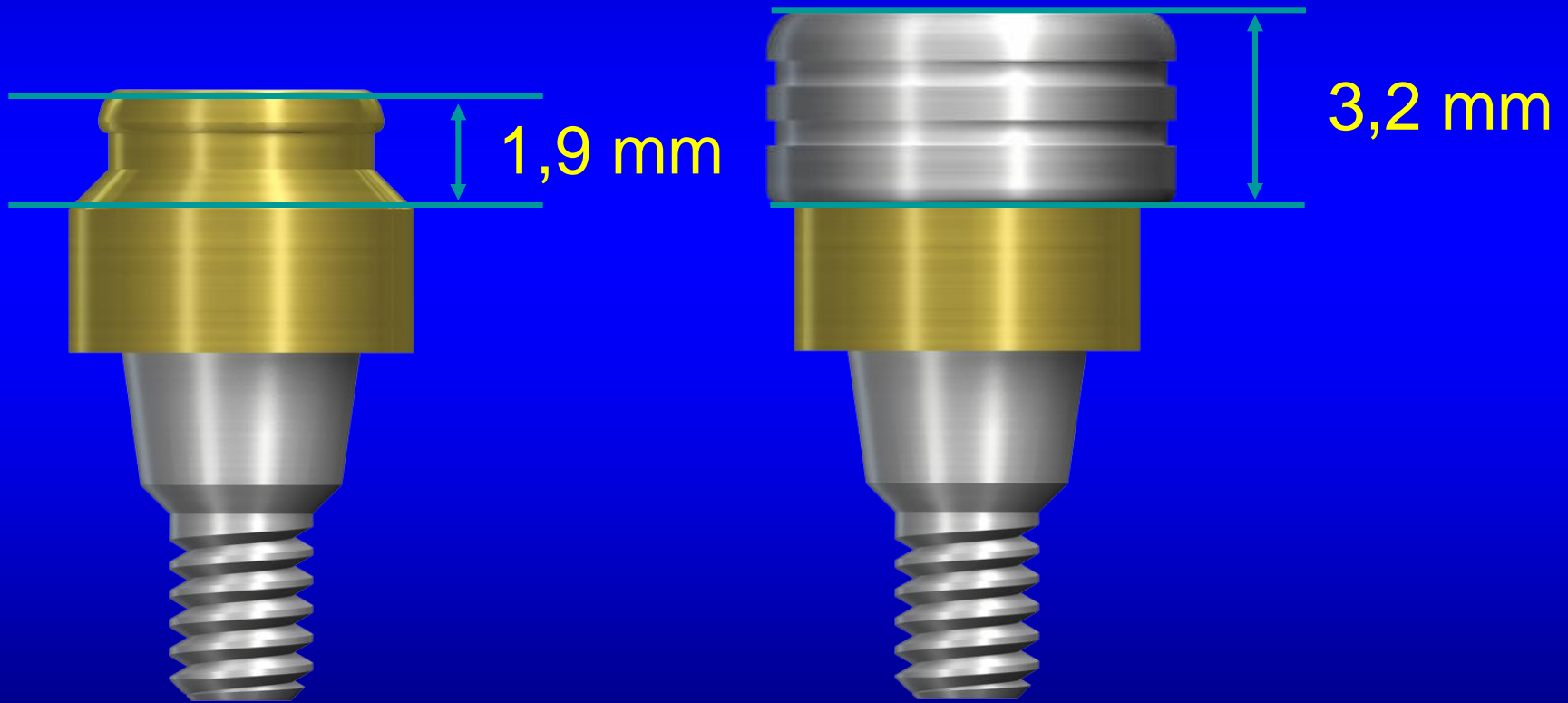
Denture design



Locator® abutments



LOCATOR[®] height



LOCATOR[®] components

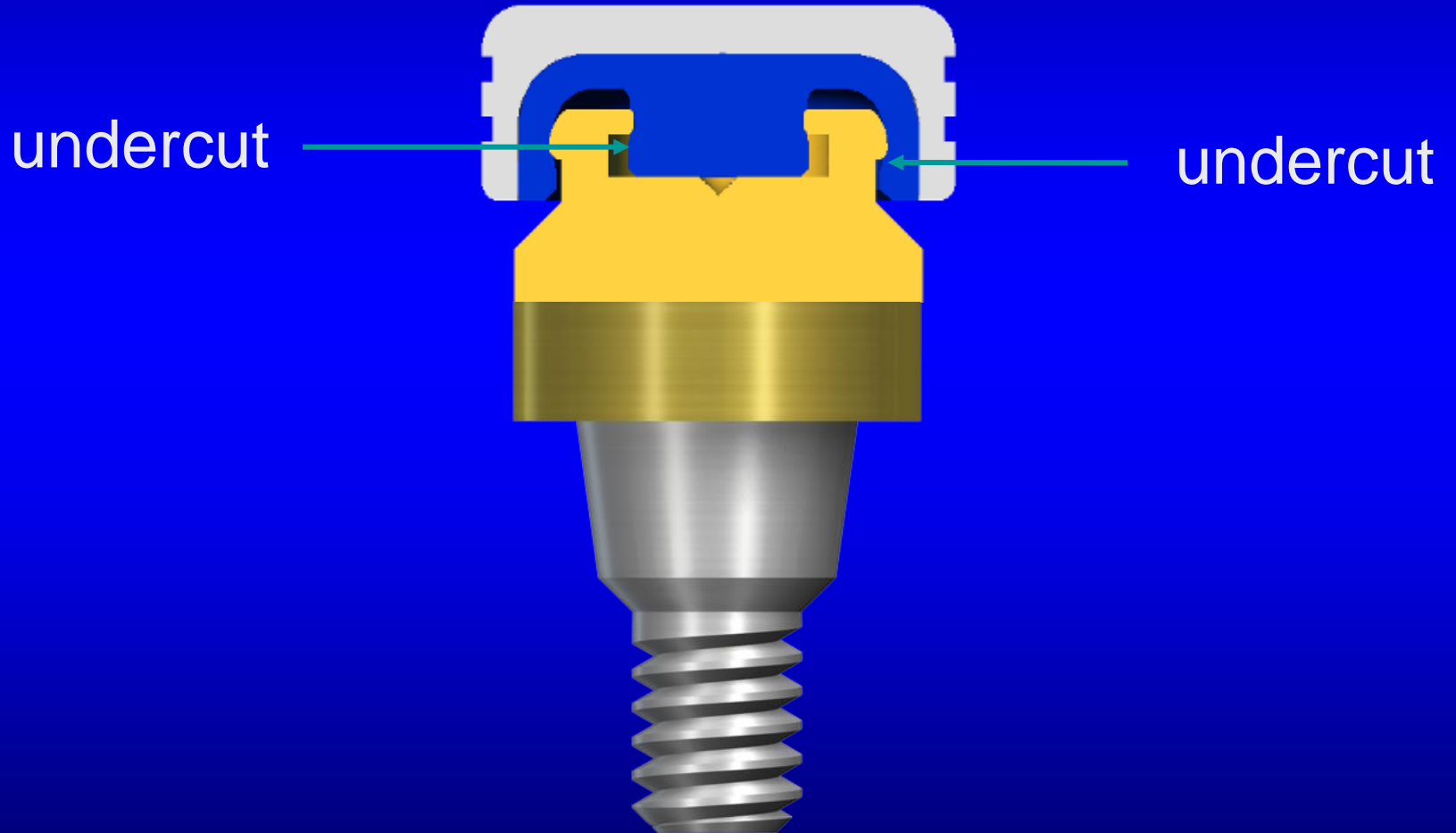


white	pink	blue	green	red
1°-10° *	1°-10° *	1°-10° *	11°-20° *	11°-20° *
5 lbs**	3 lbs**	1,5 lbs**	3-4 lbs**	1,5 lbs**
2,27 kg	1,36 kg	0,68 kg	1,36-1,84 kg	0,23 kg

* for the correction of angle divergence

** lbs = retention force

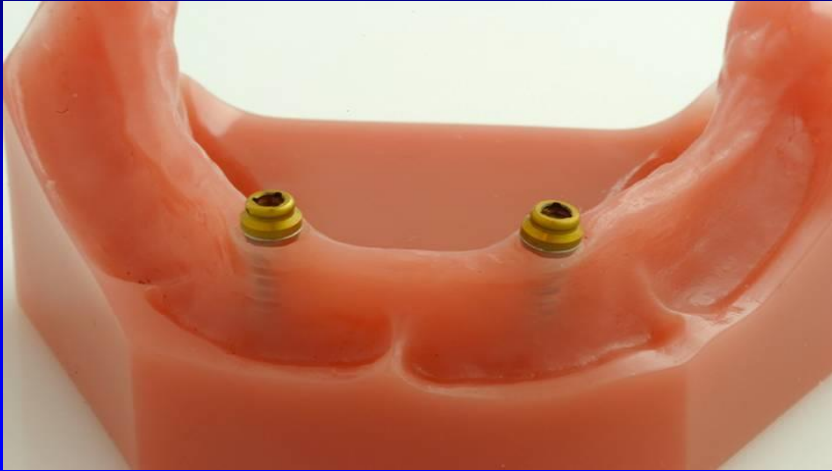
Dual retention



Abutment insertion with 35 Ncm



Impression-taking



Master cast and denture fabrication



Denture fabrication



Replacement males selection



Edentulous lower jaw: overdenture with Locator® attachments



Maxillary overdenture with Locator® attachments





Overdenture
„in situ”



A photograph of a forest path in autumn. The path is covered in fallen leaves in shades of red, orange, and yellow. The trees lining the path have vibrant yellow and orange foliage. A red metal fence runs along the sides of the path. The text "See you on the final exam" is overlaid in the center in a bold, yellow font.

See you on the final exam