


NobelReplace™ Conical Connection System

IMPLANTOLOGY YEAR COURSE
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NobelReplace™ Tapered Groovy

Agenda

- Introduction to NobelReplace™ Conical Connection
- Hands-on – Surgical Skills Study Days
 - Implant Placements with NobelReplace™ Conical Connection
 - Impression taking

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NobelReplace™ Tapered Groovy

Key features

- Color coding throughout the system provides easy and fast identification of components
- Colour shows platform size



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NobelReplace™ Tapered Groovy

Key features

- Ease of use - standardized step-by-step drilling protocol
- Drills allow *internal* cooling



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NobelReplace™ Conical Connection

TiUnite® “all the way up”

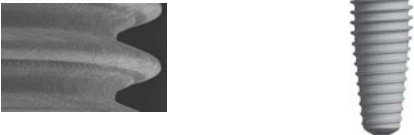
- Greater surface area than machined surface implants

Grooves on Threads

- Up to 30% higher 'primary' stability

Grooves on Collar

- Intended for hard and soft tissue stabilization and improved long term esthetics




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NobelReplace™ Conical Connection

5 lengths...

8 10 11.5 13 16




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NobelReplace™ Conical Connection

Abutment Connection Connection

- Hexagonal design facilitates easy and secure abutment connection
- Morse taper above internal hex
- Color-coded to facilitate treatment planning, clinical procedures and component identification




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NobelReplace™ Conical Connection

Morse Taper

- Invented in 1864 by engineer, Stephen Morse

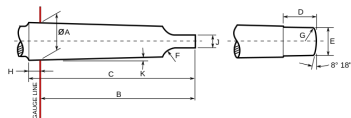


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Morse Taper

- Cone to cone system
- Specific angulation of taper



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Morse Taper



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NobelReplace™ Conical Connection

Morse Taper



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Implant Packaging

- All caps on Tapered Implants are color-coded in relation to platform size
- Peel off labels



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OsseoCare drill motor



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Drilling Procedure



High speed 800 rpm

Screw Tap and Implant Placement



Low speed max 45 Ncm

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Tapered Protocol

- Product Reference line



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NobelReplace™ Conical Connection

Flap



- When it is necessary to observe the underlying alveolar bone and adjacent anatomical structures
- When placing bone and/or connective tissue grafts

Flapless



- When it is not necessary to raise a flap to safely direct drilling procedure in relation to the anatomy (e.g. CT scanning & surgical guides)


- When there is sufficient quantity and quality of alveolar bone and soft tissue (i.e. good papilla)

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NobelReplace™ Conical Connection

Flap Procedure
NobelReplace™ Tapered Groovy 4.3x13mm

Precision drill – to mark entry point and steady next drill



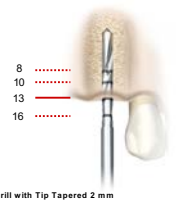

Precision drill
2,000 rpm

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NobelReplace™ Conical Connection

Flap Procedure
NobelReplace™ Tapered Groovy 4.3x13mm

Drill to the desired depth **Check orientation**

Drill with Tip Tapered 2 mm
800 rpm



Direction Indicator

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Flap Procedure
NobelReplace™ Tapered Groovy 4.3x13mm

Enlarge the site **Check orientation**

Drill Tapered 3.5 mm
800 rpm



Direction Indicator

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NobelReplace™ Conical Connection

Flap Procedure
NobelReplace™ Tapered Groovy 4.3x13mm

Enlarge the site **Check orientation**

Drill Tapered 4.3 mm
800 rpm

Direction Indicator

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Optional Procedures



Dense Bone Drill Tapered
800 rpm

Screw Tap Tapered

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Implant Packaging



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NobelReplace™ Conical Connection

Implant Placement



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NobelReplace™ Conical Connection

Implant Placement



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NobelReplace™ Conical Connection

NobelReplace™ Manual Torque Wrench Surgical



For Immediate Function 35-45 Ncm

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NobelReplace™ Conical Connection

One-stage – Delayed Function

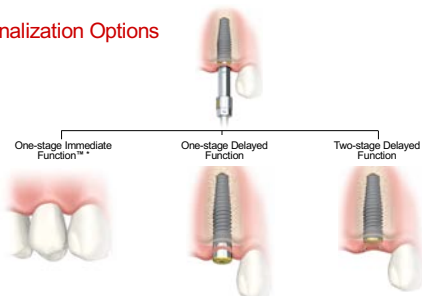
Healing Abutment placement



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Finalization Options



* Provided that final torque of min. 35 Ncm can be achieved at implant placement

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NobelReplace™ Tapered Groovy



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PROSTHETIC STAGE



NobelReplace™ Tapered Groovy



One-stage – Delayed Function

Healing Abutment removal



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Place impression coping



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Closed tray method

1. Ensure fully seated
2. Check orientation
3. Seal with soft wax



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Impression taking

1. Impregum (HARD)
2. Pentamix
3. Hard, stiff tray



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Remove coping



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NobelReplace™ Tapered Groovy

Laboratory stage

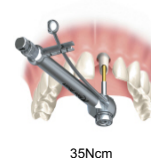
Attaching implant replica



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NobelReplace™ Tapered Groovy

Final fit stage



35Ncm

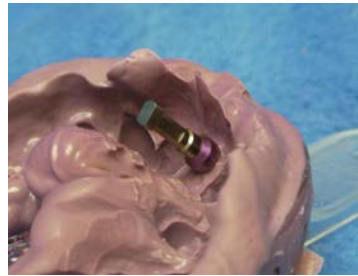


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Laboratory Procedures



Rotate and push back into impression



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Open Tray



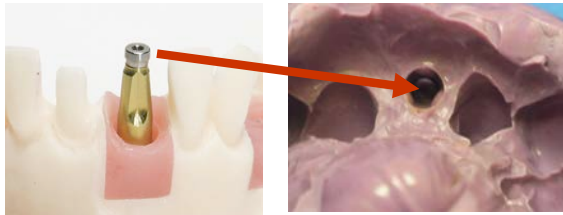
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OpenTray



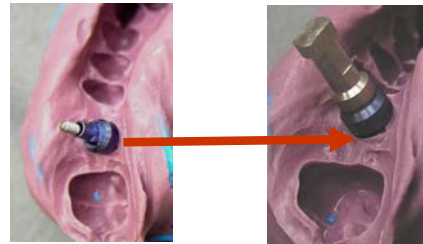
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Closed tray – narrow platform



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Checking the impression



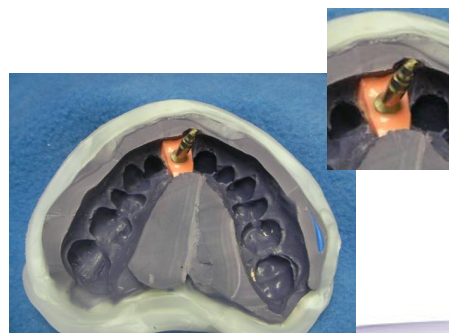
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Checking the impression



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Soft tissue



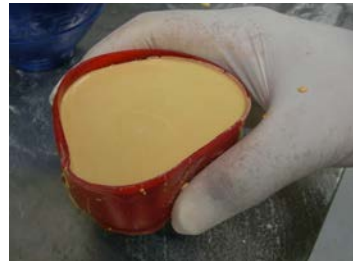
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Boxing the impression



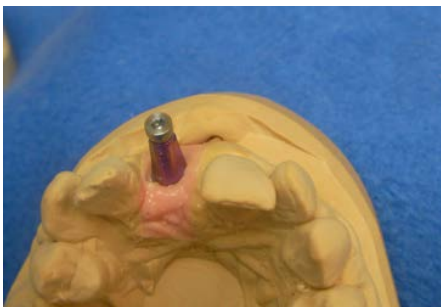
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Low expansion dental stone



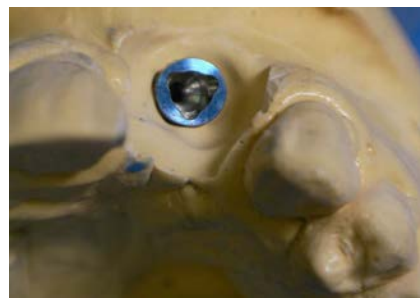
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Finished model



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Fixture replica



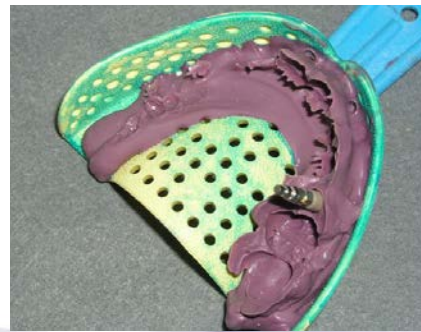
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Why things can go wrong



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Why things can go wrong



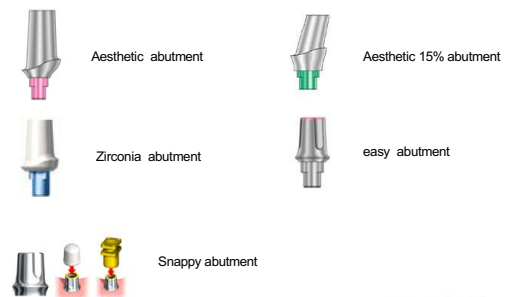
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Abutments

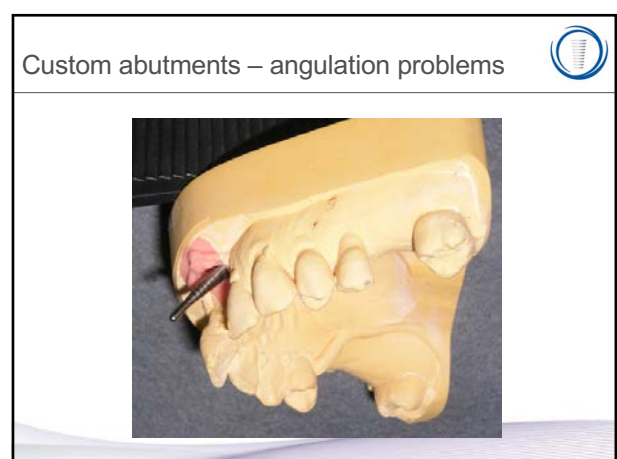
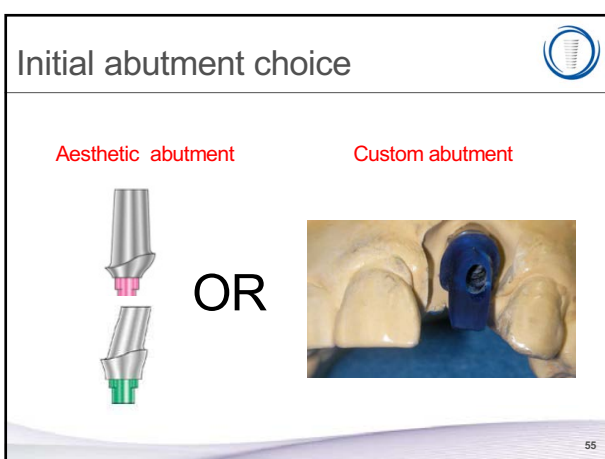
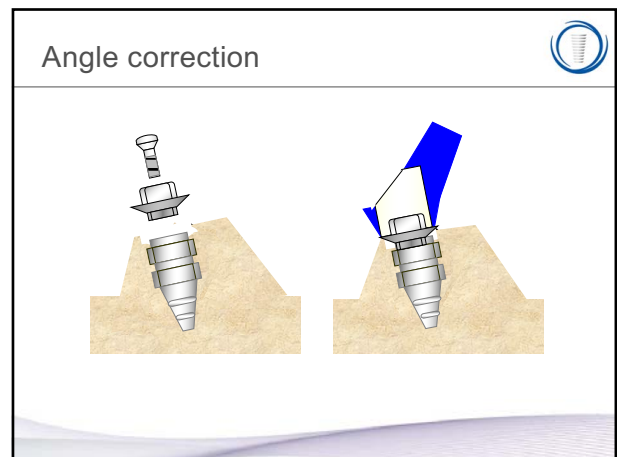
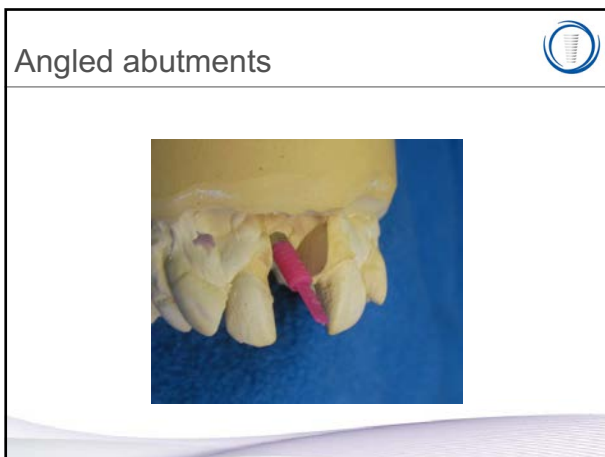


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Cement retained



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Custom abutment – finishing margin



Procera scanner



Titanium custom abutment

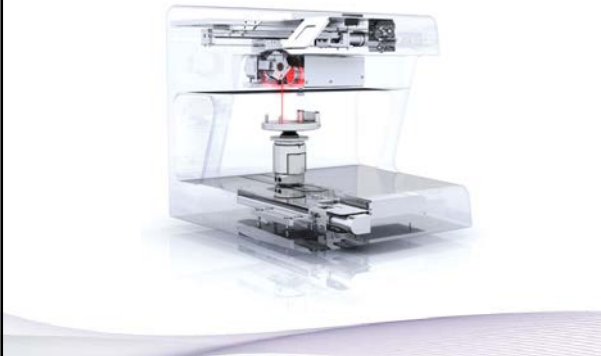
Prepared for scanning



Custom abutment



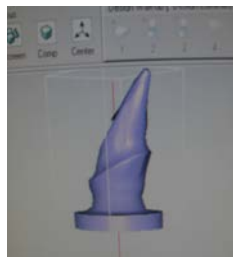
Procera scanner



On screen design tools



On screen design tools



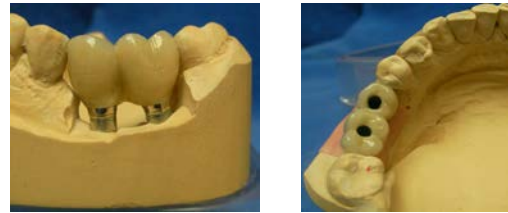
Screw retained



Screw Retained



Screw Retained



Final crown

Cement or screw retained

- Margins for **Cement retained** crowns must be correctly placed
- Poor abutment retrievability
- Retained cement complications
- **Screw retained** crowns are in one piece
- Good retrievability
- Access holes need to be in a non aesthetic position
- Eliminate retained cement complications

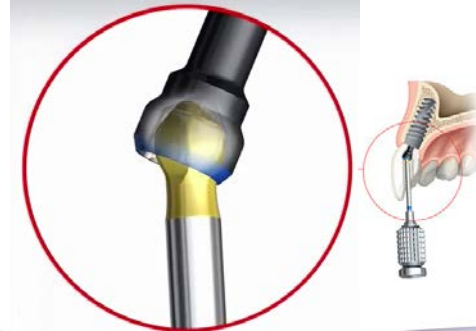
Screw retained - problems



Screw retained – Angled Screw Correction (ASC)



Screw retained – Angled Screw Correction (ASC)

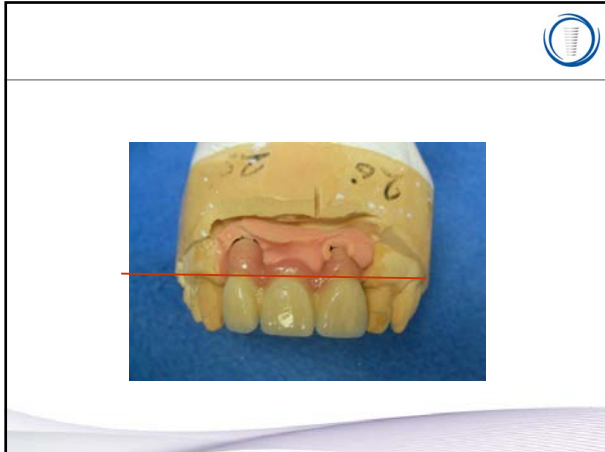


Aesthetic problems

Patients need to be aware that some restorations will need pink gum work due to the tissue changes that may occur after implant placement.

Pink gum tissue





Final crown

Porcelain or Composite?

Porcelain has high aesthetic value
Risk of chipping or cracking
Repairs need to be returned to laboratory
Patient may need a temporary crown

Composite has good aesthetics.
High impact absorption rate
More suitable for patients with bruxism
Simple chair side repairs are possible

NobelProcera™
Zirconia Crown

All-ceramic strength

- Zirconia for the higher load situations, extremely high flexural strength, 1200 MPa
- 0.7 mm thickness for use in all indications
- 0.4 mm thickness for the aesthetic zone
- superior zirconia strength and esthetics
- available in 4 different shades

ANTERIOR BRIDGE
THE PLANNED APPROACH

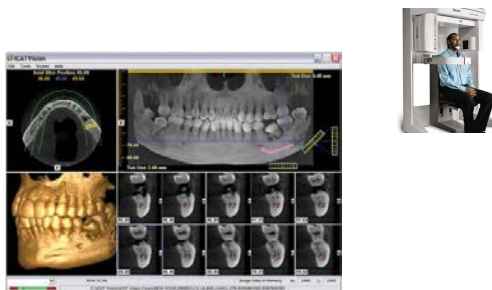
Diagnostic set up



CBCT scan with radiographic stent



CBCT scan analysis



CBCT scan analysis

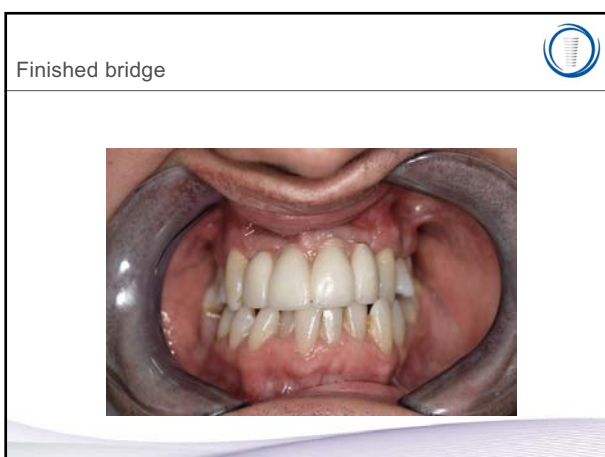
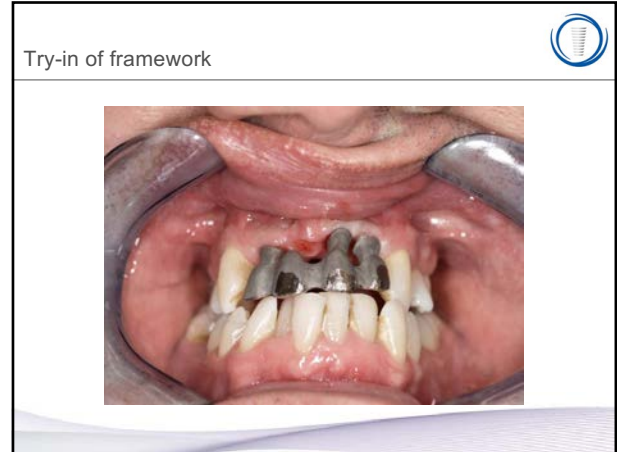
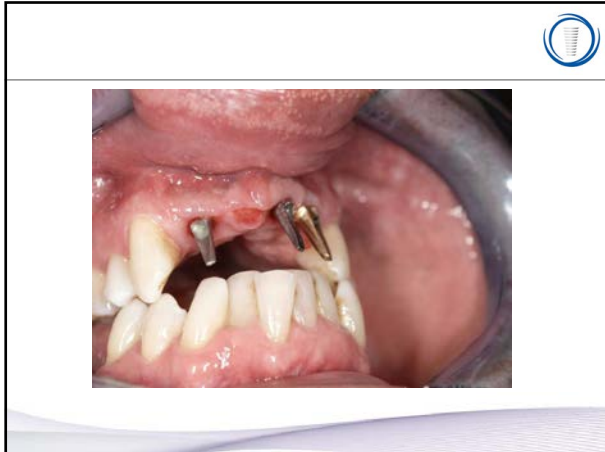


Placement Template



Placement template





Diagnostic set up



THE END