Guided Implant Surgery in Edentulous and Partially Edentulous Ridges

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Ball Overdenture Attachment

O-Ring Overdenture Attachment

Locator Overdenture Attachment
Locator Retention of the Maxillary Denture:
Locator Retention of the Obturator Denture:
Locators: An alternative to precision attachment retention of partial dentures.

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Locator Retention of Partial Dentures
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Kennedy Class IV
Locator Retention of Partial Dentures
Step One: Create clear duplicate of denture.
Step Two: Insert radiopaque markers. (Gutta Percha points)

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- Lower Partial Dentures and Problems They Cause
- Oh Alginate! How do I Love Thee! Let me count the ways....
- Lingualized Occlusion
- Keeping Up With the Technology of Restorative Dentistry (LSU Alumni Day Lecture)
- Galliob-Cerec Integration for Guided Implant Surgery
- Guided Implant Surgery for Removable Prostheses
- Great Surgical Guide for Restoration of Hemi-Mandibulary Patient
- The Implant Overdenture: Use of the Locator® Attachment
- Restoration of the Head and Neck Cancer Patient
- Implant Overdentures: Use of the O-Ring Implant Abutment
- Construction of Metal Occlusion Surfaces
- E-Max Posterior Teeth for Partial and Complete Dentures
- Palate-Less Maxillary Denture
- The Branching Technique of Denture Construction (slides)
- The Branching Technique of Denture Construction (video)
Step Two: Insert radiopaque markers. (gutta percha points)

Potential position of implants transferred to surgical stent.

Use #4 round bur to create 5 mm deep hole in acrylic. Fill with #15 gutta percha point. Cut off at tissue surface with warm instrument.

Duplicate of lower partial denture is surgical stent.
Step Three: Scan #1
Step Four: Attach reference body to stent.
Step Five: Scan #2
Milled Drill Bodies:

- Implant Drill Guide Channel
- Vertical Stop
- Tissue Surface
Step Six: Guided Implant Surgery
Three months later…..

….. seat Locator abutment heads.
Drill bodies “snapped” into position.

Orientation Notch
Modification of Temporary Partial Denture:

Soft reline eliminates contact with healing heads.
Step One: Create clear duplicate of denture.
Step Two: Insert radiopaque markers.
Step Three: Scan #1
Step Four: Attach reference body to stent.
Step Five: Scan #2
Step Six: Guided Implant Surgery

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Four months later .............
Use of the Sicat Surgical Guide In Reconstruction of the Hemi-Mandilection Patient

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Sarcoma of the Mandible
Sarcoma of the Mandible

Fibula Bone Graft

Non-Union
Sarcoma of the Mandible
Preparation of the Radiographic Template:

Partially Edentulous Arch  Wax - Up  Putty Matrix

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Preparation of the Radiographic Template:

Create replica of wax-up in radiopaque resin (Jet XR) available from Lang Dental:
Or, mix Barium Sulfate (15% by weight) with clear acrylic resin.
Preparation of the Radiographic Template:
Prepare thermoformed stent (suck-down) with a minimum 1.5 mm thickness to 2.0 mm maximum thickness.

Radiopaque replica must sit flush on tissue.
Transfer midline to biteplate.
Bond biteplate to stent with self-cured acrylic.
Align occlusal plane parallel with conebeam slice.
Sicat Surgical Guide:
Universal Plunger Loc Attachment (Preat Corp.)

Milled holes for plunger attachment.
Bar shortened to reduce stress on distal implant. Prosthesis to end at first molar.

Processing jigs in place to provide site for plunger attachment.
Case in processing flask, wax boiled out, undercuts blocked out and bar coated with Rubber-Sep®.

Final Wax-Up

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Remove processing jigs.

Try-in plunger attachments.

Shorten attachments for flush fit.

Bond attachments to prosthesis with cold-cure acrylic resin.
Removable prosthesis provides gingival bulk and accessibility for cleanliness.

Metal occlusal surface prevents excessive wear and reduces stress on acrylic.

Universal plunger attachments provide secure retention.
Professional Articles

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