Predoctoral Implant Program Philosophy
For
Implant Supported Single Tooth and Overdenture Prostheses

I. Single Tooth Implant Supported Fixed Prostheses

Assessment, Consultation, Diagnosis and Treatment Planning

Completed Patient Record

Before considering implant therapy for a patient, the entire Axium Electronic Health Record (EHR) must be completed. This includes (but is not limited to) the medical history, odontogram, periodontal charting, treatment planning module and radiographic records. There should not be any unapproved areas in the patient record. Patient records with unapproved notes, forms or treatment plans will not be considered for implant therapy.

Diagnostic Assessment

A diagnostic assessment must be completed for all patients considering implant supported fixed prostheses. The assessment checklist can be found in room 311. This must be completed prior to obtaining a Prosthodontic consultation. Patients must not be missing more than two contiguous teeth requiring replacement with implants. Also, patients must not require an opposing implant supported restoration. Acceptable patients must meet all of the diagnostic criteria.

Health History

- The health history must be updated and reviewed.
- **ASA Classification** - Patients must be within ASA Class I, II, or III.
- There should be no significant pre-existing medical condition(s) that will exclude patients from consideration for clinical implant care.
- **Psychosocial considerations** – There should be no significant psychosocial issue(s) that would contraindicate care.

Radiographic and Clinical Assessment

- **Radiographs** – A current Periapical and Panoral radiograph must be available.
- **Indications** – Either a single or two contiguous missing teeth in the maxilla or mandible. This may involve any tooth except maxillary central incisors and any second or third molars. Tooth #’s 23-26 may only be treated with the approval of the Predoctoral Implant Director.
- **Bone Height** – Bone height must be 10 mm or greater in the maxilla or anterior mandible as determined by periapical radiograph. In the mandibular posterior region the bone height must be at least 12 mm above the inferior alveolar nerve as determined by periapical radiograph.
Ridge Width – Facial-Lingual edentulous ridge width must be greater than 7 mm as measured clinically 3-4 mm below the crest of the ridge. No significant buccal or lingual concavities may be present.

Single Tooth Replacement (STR) - The Mesial-Distal edentulous ridge width must be at least 7 mm between roots as examined clinically and by periapical radiograph. 7mm may be acceptable for maxillary lateral incisors and mandibular incisors, however increased ridge width may be required for other teeth.

Two Teeth Replacement (TTR) - The Mesial Distal edentulous ridge width must be at least 14 mm between roots as examined clinically and by periapical radiograph.

Lip Line – No anterior restorations may be considered for patients with high lip lines displaying the gingival tissues prominently.

Occlusion – Patient must present a manageable occlusal scheme displaying a mutually protected occlusion, an even/regular occlusal plane, and a stable maximum intercuspation. Any supra-eruption of the opposing dentition into the edentulous site must be corrected as part of any treatment plan involving implant supported care. An adequate interocclusal space of at least 5 mm (measured from the soft tissue ridge crest) must exist. No loss of occlusal vertical dimension may be present.

Soft Tissue – Adequate attached tissues must be present. Prior to implant placement, a minimum of 4 mm of keratinized tissue should be present (or achievable) at the surgical site as measured clinically from the facial to the lingual mucogingival junctions. If inadequate tissue is present but can be corrected, an additional fee will be charged for any corrective soft tissue procedure.

Surgical Intervention - Surgical revision of the implant site may be indicated other than the planned implant placement (e.g., hard tissue augmentation, soft tissue revisions, insufficient interarch space, etc). If the surgical revision is minor and can be accomplished on the same day as the implant surgery, the patient is acceptable for treatment at the Predoctoral level. However, if major surgical intervention is required, (e.g., block grafts, major sinus lifts, etc.) the patient will not be considered for implant placement in the Predoctoral program. The final decision of patient acceptability will be made by the Predoctoral Implant Director.

Immediate Placement – Immediate implant placement may be considered in cases where the prosthodontic and surgical consultants feel it is the best treatment option. These patients must have ideal bone levels, with minimal bone or tissue grafting requirements. There will be no immediate loading of dental implants in the Predoctoral Implant Program. No sign of pathology may be present.

Implant Placement – Implants will be placed at the buccal-lingual center of a line drawn through the centers of the adjacent teeth. In all cases – the implant fixtures will be placed so the resting platform is level with the existing crest of bone, and at least 2mm apical to adjacent CEJ’s.
Immediate Loading - There will be no immediate loading of single tooth implants at the predoctoral level. If a patient is a candidate for this, they must be referred to post-graduate prosthodontics for completion of treatment.

Consultation, Treatment Planning and Patient Assignment

- A comprehensive diagnosis and treatment plan must be completed for every single tooth implant patient. The initial step in this process is a consultation appointment in the Predoctoral Implant Clinic (room 311).

1. Required Pretreatment Records for consultation appointment:
   - Current Panoral Radiograph
   - Current Periapical Radiograph of Edentulous Area to be Restored
   - Implant Diagnostic Checklist and Evaluation
   - Mounted Diagnostic Cast and Wax-up
   - Surgical/Radiographic Guide

2. If the patient is acceptable for single tooth implant care at the pre-doctoral level, the Prosthodontic consultant will sign the implant diagnostic checklist. The patient is then assigned a surgical resident.

3. The treatment plan is developed by the student and approved by the primary restorative instructor in the group practice clinic. The student must present the signed checklist to the restorative instructor before the final implant portion of the treatment plan is approved.

4. The student will contact the surgical resident and schedule a surgical consultation appointment. A surgical guide should be fabricated for evaluation at that appointment. The implant diagnostic checklist should be signed by the surgical attending once it has been approved. THE STUDENT MUST BE IN ATTENDANCE AT THE SURGICAL CONSULTATION APPOINTMENT.

Radiographic/Surgical Guide

- A Radiographic/Surgical Guide must be fabricated in the Predoctoral Implant Clinic by completing a diagnostic wax-up and duplicating it with clear acrylic resin. The guide will generally cover at least 6 teeth, 3 teeth on either side if possible. A wire, approximately 10mm in length, will be placed on the buccal surface along the planned path of placement. A periapical radiograph will be taken with the surgical guide in place.

- Following evaluation of the radiograph, guide holes will be placed to guide the planned surgical procedure. The guide holes should be positioned for optimum placement and parallelism to avoid any adjacent teeth and sensitive anatomical structures.

- The guide holes should be parallel to avoid issues with the planned prosthetic attachments. The implants should be positioned such that the implant will be a minimum of 2 mm away from adjacent teeth and their root extensions. The guide holes and pin should properly position the implant mesial-distally, and buccal-lingually to allow for an ideal final restoration.

- The surgical guide should be provided to the surgical resident for evaluation at least one week prior to the surgical consultation. At the surgical consultation, the properly disinfected surgical
guide should be provided for clinical evaluation. In addition, all current radiographs, diagnostic casts and treatment plans must be available.

5. Once the implant surgery is scheduled, the student must obtain the selected implants and cover screws from the Predoctoral Implant Program faculty at least TWO WEEKS prior to the surgery. If this protocol is not followed, implants and associated parts may not be available for the appointment.

6. An appointment for the implant surgery is scheduled with the patient and the surgical resident. THE STUDENT MUST ATTEND THE IMPLANT SURGERY WITHOUT EXCEPTION.

Surgical Protocols

Patient Approval and Informed Consent must be obtained prior to surgical therapy. All potential complications must be explained to the patient in detail.

Implant Type and Location

- Implants will be Nobel Biocare Straight Groovy endosseous root form implants. The implants will be either 3.5 (NP), 4.3mm (RP) or 5.0mm (WP) in diameter, and at least 10 mm in length.

Medication

- Antibiotic therapy is indicated for implant placement procedures. Patients will be pre-medicated 1-hour before the surgery using established AHA guidelines. The antibiotic regimen will be continued for a minimum of 7 days postoperatively.

- Pain Medication - Patients may be provided an appropriate narcotic for pain management as needed.

- Anti-inflammatory Medication - Non-steroidal anti-inflammatory (Motrin) will be prescribed for short term use up to 7 days post-operatively, unless the patient is non-tolerant of such medication.

- Plaque Control/Oral Hygiene- Peridex rinses or an equivalent will be prescribed for a period of one week post surgery to aid in plaque control.

Implant Surgery

- A two-stage protocol will be used. This calls for placement of the implant fixture and complete wound closure, followed by a healing period of at least 4 months. A second stage surgery is then used to uncover and gain access to the implant fixture.

  1. Vital signs will be taken including blood pressure and pulse
  2. Local anesthesia as indicated
  3. A midcrestal incision should be made dividing the remaining keratinized tissue. The length of the incision should facilitate flap reflection that will allow adequate visualization of
anatomic structures. Most importantly, undercuts should be visible on the maxillary and mandibular facial and mandibular lingual aspects of the alveolar process to the length of the proposed implant. This will minimize the chance of perforating the cortical bone in the apical area when preparing an osteotomy to receive the implant.

4. Once exposed, the bone should measure a minimum of 5mm Facio-lingually at the coronal aspect. Apically, the F-L bone thickness should allow for at least 1mm of bone on either side of the implant.

5. The placement of the implant will be facilitated and verified by scoring the crestal bone with a round bur. The surgical guide will be used to verify this location.

6. Utilizing the surgical guide - A pilot hole will be drilled per the existing drill sequence. The appropriate drill sequence will then be followed as indicated by the Nobel Biocare system.

7. The implant fixture will be placed using the manufacturer protocol. Care must be taken to avoid any contact with the implant surface. In general, the top of the implant fixture will be placed to the osseous crest.

8. An appropriate cover screw will be placed followed by wound closure with sutures.

9. Any pre-existing removable prostheses must be lightly relieved adjacent to the surgical site.

10. A periapical and/or panoral radiograph will be taken immediately post-operatively.

11. The patient will be provided oral and written post-operative instructions, and the indicated prescriptions.

12. The surgical guide should be cleaned, disinfected and appropriately maintained so that it can be used to assist in the second stage surgery.

- Post-Operative Follow-up

1. Post-operative evaluation 2-days post surgery (only if needed)
2. Post-operative evaluation and suture removal 7-10 days post-surgery
3. Recalls as needed thereafter until second stage surgery
4. Periapical radiographs should be taken at 4 months post-surgery

- Second-Stage Surgery

  o Second-stage surgery will proceed 4 or more months after the initial implant placement surgery. The location of the implants will be determined via clinical examination and use of the disinfected radiographic/surgical guide. Local soft tissue anesthesia will be obtained. A small incision over the implants and within the keratinized tissue will expose the top of the implant. The cover screws will be removed.

  o A Nobel Biocare healing abutment of the appropriate length and width will be placed to optimize esthetic contours. The healing abutment will be torqued to 15 NCm in each of the implant fixtures. It should extend at least 2mm above the soft tissue. Sutures will be placed as needed. The soft tissue will be allowed to heal a minimum of 4 weeks. The patient will be provided oral and written post-operative instructions.
Prosthetic Protocol-Post Surgical

- All restorative patient care will occur within the Predoctoral Implant Clinic (room 311)

- The diagnostic assessment and treatment plan must be reviewed with an instructor prior to any restorative appointments.

- Appointment #1
  a. Tissue will be evaluated for color, contour, thickness, consistency and overall health.
  b. Healing abutment will be removed and the impression technique of choice will be determined (abutment level or implant level impression).
  c. With abutment level impression, final abutment is placed and seating verified with a periapical radiograph. Once verified, the abutment is torqued to 35 Ncm UNDER INSTRUCTOR SUPERVISION. The successful completion of the screw tightening will be checked by attempting to remove the abutment screw by hand. If successful, the abutment will be re-torqued to 35Ncm. If the abutment screw is removable by hand, the above sequence is repeated until sufficient torque is achieved.
  d. A provisional restoration will be fabricated for all anterior restorations. A healing cap may be used for posterior restorations.

- Appointment #2 (or continuation of Appointment #1)
  a. The provisional restoration or healing cap will be removed.
  b. The appropriate impression coping will be chosen to facilitate the final impression.
  c. The final impression will be made. The final impression method (open tray, closed tray, implant level or abutment level impression) will be determined by the specific situation. In general, the impression of choice will be an abutment level impression, closed tray.
  d. All necessary records will be obtained from the patient in the following sequence:
     i. Shade (Must be taken before the final impression)
     ii. Opposing impression or cast
     iii. Occlusal registration in Maximum Intercuspation Position with teeth in contact and per fixed philosophy.
     iv. Impression of provisional restoration or duplicate of diagnostic wax-up

- Laboratory Steps
  a. Student must obtain the following as needed:
     i. Implant replica
     ii. Abutment replica
  b. Student will complete lab form in Axium and have swiped by instructor.
  c. Student will send case out to designated lab.

- Appointment #3
  a. Provisional restoration or healing cap is removed
  b. Re-torque abutment to 35Ncm (if abutment level impression was made) or place final abutment, verify seating with periapical radiograph and torque to 35 Ncm (if implant level impression was made). See Appointment #1C above for correct procedures to torque abutments.
  c. Final restoration is seated and adjusted in the following sequence (per fixed philosophy):
     i. Interproximal contacts
     ii. Margins verified/crown disclosed and adjusted if necessary
     iii. Occlusal adjustment
     iv. Any additional contours needing adjustment
d. A periapical radiograph is obtained prior to cementation to verify marginal fit of the crown and adaptation of the abutment to the implant.
e. Final restoration is cemented with permanent cement (see Fixed Protocol).

Maintenance Care

Patients with Single Tooth Implant supported crowns require regular maintenance. Patients will be responsible to cover the expenses associated with maintenance including but not limited to replacement of restorations, adjustments, and repairs. Patients will be responsible for the fees associated with any maintenance radiographs. A periapical radiograph should be made annually. Maintenance/recall visits should be scheduled at three months, six months, then annually. The following should be evaluated at each recall appointment:

1. Implant/Crown stability  
2. Occlusion  
3. Marginal integrity  
4. Restoration integrity  
5. Gingival tissues  
6. Adjacent teeth  
7. Periapical radiograph (annually)

II. MANDIBULAR IMPLANT SUPPORTED COMPLETE DENTURE PROSTHESSES

Assessment, Consultation, Diagnosis and Treatment Planning

Completed Patient Record

Before considering implant therapy for a patient, the entire Axium Electronic Health Record (EHR) must be completed. This includes (but is not limited to) the medical history, odontogram, periodontal charting, treatment planning module and radiographic records. There should not be any unapproved areas in the patient record. Patient records with unapproved notes, forms or treatment plans will not be considered for implant therapy.

Diagnostic Assessment

A diagnostic assessment must be completed for all patients being considered for implant supported mandibular dentures. All completely edentulous patients must have an implant consult in the Predoctoral Implant Clinic. Patients who have existing complete denture prostheses must have them evaluated as being adequate (see below). Patients should be PDI Classification I or II, and must meet all of the diagnostic criteria.

Health History

- The health history must be updated and reviewed.
- ASA Classification - Patients must be within ASA Class I, II, or III.
- There should be no pre-existing medical conditions that will exclude patients from consideration for clinical implant care.
Psychosocial considerations – There are no or minimal psychosocial issues that would contraindicate care.

Radiographic and Clinical Assessment

Radiographs – A current Panoral radiograph must be available. It should be noted that Panoral radiographs are typically distorted and magnified.

Implant Placement – Implants will be placed in the approximate region between the mandibular lateral incisors and canines. In all cases – the implants will be placed approximately 14 mm anterior to the mental foramen as measured from the center of the implant body or 12 mm from the distal of the implant to the most anterior extent of the foramen. This will allow for an additional implant to be placed in the future, if desired.

Immediate Placement- Immediate placement of implants for overdenture patients is not allowed at the predoctoral level. In the limited instances that this is required, the patient must be referred to post-graduate prosthodontics to complete treatment.

Bone Height – Bone height must be 16 mm or greater as determined radiographically.

Ridge Width - Ridge width at the implant placement site must be at least 7 mm as measured clinically 3-4 mm below the crest of the ridge. Adequate bulk of the denture base acrylic must be present in this area (see below).

Soft Tissues – Adequate attached tissues must be present to support the denture base. A minimum of 4 mm of keratinized tissue must be present in the surgical site when measured clinically from the facial to the lingual mucogingival junctions.

Prosthodontic Diagnostic Index (PDI) – Patients must be PDI class I or II – as defined by the following guidelines:

Bone Height – Radiographic bone height is 16 mm or greater in the thinnest area of the mandible.

Maxillomandibular Relationship – Position of the artificial teeth. The maxillomandibular relationship allows tooth position that has normal articulation (class I) with the teeth supported by the residual ridge.

Residual Ridge Morphology
- Hard palate form - Palatal morphology that resists vertical and horizontal movement of the denture base.
- Anterior maxilla – adequate vestibular depth with supporting tissues present.
- Maxillary tuberosities
- Tuberosities are well defined and resist vertical and horizontal movement.
- Tuberosities are not enlarged in a manner to interfere with normal tooth placement or function.
- Vestibular depth that resists horizontal movement of the denture base.
- Hamular notch is well defined to establish the posterior extension of the denture.
• Boney irregularities - Absence of tori and exostoses.

- **Muscle Attachments** – No undue muscle impingements during normal function in all regions. Muscle attachments are conducive to denture base stability and retention.

- **Surgical intervention** - No surgical revision of the denture supporting areas is indicated other than the planned implant placement. (e.g., hard tissue augmentation, soft tissue revisions, insufficient interarch space, etc)

- **Denture History** – Denture wearing history is conducive to successful therapy. Patient is comfortable with the maxillary prosthesis.

- **Existing Complete Denture Prostheses (if already fabricated)**
  The existing complete denture prostheses must be evaluated prior to implant care. All aspects must be considered adequate prior to proceeding with implant care. If necessary, new dentures may need to be fabricated. The following aspects of the dentures must be evaluated:

  • **Occlusal Vertical Dimension** (rest position, closest speaking space, measurements)
  
  • **Esthetics** (tooth position, lip support, tooth condition - size, shape, and color)
  
  • **Tooth position** (phonetics, anatomic landmarks, lip support, measurements)
  
  • **Occlusal Plane** (anatomic landmarks, esthetics, occlusion)
  
  • **Oclusion** (stable and uniform maximum intercuspation)
  
  • **Denture extension** - over or under extension must not be present

  • **Denture stability and adaptation** – Dentures must be stable and well adapted

  • **Denture Bulk** - The denture base acrylic must be a minimum of 4mm in thickness over the proposed implant placement sites.

  • **Patient satisfaction** - The patient must be satisfied with their maxillary prostheses. Their primary concerns must be with their mandibular denture - retention, stability, and comfort.

**Consultation, Treatment Planning and Patient Assignment**

- A comprehensive diagnosis and treatment plan must be completed for every implant supported overdenture patient. The initial step in this process is a consultation appointment in the Predoctoral Implant Clinic (room 311).

1. Required Pretreatment Records for consultation appointment:

  • Current Panoral Radiograph
  
  • Implant Diagnostic Checklist and Evaluation
• Current Denture Prostheses (if fabricated)

2. If the patient is acceptable for overdenture implant care at the pre-doctoral level, the Prosthodontic consultant will sign the implant diagnostic checklist. The patient is then assigned a surgical resident.

3. The treatment plan is developed by the student and approved by the primary restorative instructor in the group practice clinic. The student must present the signed checklist to the restorative instructor before the final implant portion of the treatment plan is approved.

4. The student will contact the surgical resident and schedule a surgical consultation appointment. A surgical guide should be fabricated for evaluation at that appointment. The implant diagnostic checklist should be signed by the surgical attending once it has been approved.

Radiographic/Surgical Guide

A Radiographic/Surgical Guide must be fabricated in the Predoctoral Implant Clinic by duplicating the existing mandibular prostheses with clear acrylic resin. Wires, 10mm in length, will be placed along the planned path of placement approximately 2 mm anterior to the estimated site of the mental foramen. A new panoral radiograph will be taken with the maxillary denture and surgical guide in place and in occlusion.

Following evaluation of the radiograph, guide holes will be placed to guide the planned surgical procedure. The guide holes should be positioned for optimum placement and parallelism to avoid the mental foramen. The guide holes should be parallel to avoid issues with the planned prosthetic attachments. Ideally, the implants should be positioned approximately 14 mm anterior to the mental foramen from the center of the implant body or 12 mm from the distal of the implant to the most anterior extent of the foramen. The final decision on implant placement will be based on the best available bone.

The guide holes should engage the bulk of the remaining supporting tissues and the keratinized ridge. The predetermined implant location must reveal at least 4mm of remaining denture acrylic to allow for attachment placement and the attachments.

5. Once the implant surgery is scheduled, the student must obtain the selected implants and cover screws from the Predoctoral Implant Program faculty at least TWO WEEKS prior to the surgery. If this protocol is not followed, implants and associated parts may not be available for the appointment.

6. An appointment for the implant surgery is scheduled with the patient and the surgical resident. THE STUDENT MUST ATTEND THE IMPLANT SURGERY WITHOUT EXCEPTION.

Surgical Protocols

Patient Approval and Informed Consent must be obtained prior to surgical therapy. All potential complications must be explained to the patient in detail.

Implant Type and Location
Implants will be Astra Tech endosseous root form implants. Two Astra implants will be ideally placed in the area between the canine and lateral incisor, one on each side. If adequate bone does not exist in these areas, the mandibular canine area may be used. The implants will be 3.5mm or 4mm in diameter, and at least 10 mm in length.

**Medication**

*Antibiotic therapy* is indicated for implant placement procedures. Patients will be pre-medicated 1-hour before the surgery using established AHA guidelines. The antibiotic regimen will be continued for a minimum of 7 days postoperatively.

*Pain Medication* - Patients will be provided an appropriate narcotic for pain management up to 4 days post operatively.

*Anti-inflammatory Medication* - Non-steroidal anti-inflammatory (Motrin) will be provided for 7 days post-operatively, unless the patient is non-tolerant of such medication.

**Implant Surgery**

A two-stage protocol will be used. This calls for placement of the implant fixture and complete wound closure, followed by a healing period of at least 4 months. A second stage surgery is then used to uncover and gain access to the implant fixture.

**First Stage Surgery**

1. Vital signs including blood pressure
2. Local anesthesia as indicated
3. Midercrestal incision dividing the remaining keratinized tissue. The incision will be limited to the local site of the implant placement. No vertical releasing incisions will be used unless otherwise indicated. (envelope protocol)
4. Once exposed – the bone must measure a minimum of 5 mm in width.
5. The placement of the implant will be facilitated and verified by scoring the crestal bone with a round bur. The surgical guide will be used to verify this location.
6. Utilizing the surgical guide - A pilot hole will be drilled per the existing drill sequence - Astra 2.0mm diameter. The appropriate drill sequence will then be followed as indicated by the manufacturer.
7. The implant fixture will be placed using the manufacturer protocol. Care must be taken to avoid any contact with the implant surface. In general, the top of the implant fixture will be placed to the osseous crest.
8. An appropriate cover screw will be placed followed by wound closure with sutures.
9. The mandibular prostheses will be lightly relieved adjacent to the surgical site. Patients should be instructed to minimize wearing of the mandibular denture during the first 5 days post-operatively.
10. A panoramic radiograph will be taken immediately post-operatively.
11. The patient will be provided oral and written post-operative instructions, and the indicated prescriptions.
12. The surgical guide should be cleaned, disinfected and appropriately maintained so that it can be used to assist in the second stage surgery.
Post-Operative Follow-up

1. Recall evaluation 2-days post surgery
2. Recall evaluation and suture removal 7-10 days post-surgery
3. Monthly recalls as needed until second stage surgery
4. Panoral radiographs should be taken at 2 and 4 months post-surgery

Second-Stage Surgery

Second-stage surgery will proceed 4 or more months after the initial implant placement surgery. The location of the implants will be determined via clinical examination and use of the disinfected radiographic/surgical guide. Local soft tissue anesthesia will be obtained. A small incision over the implants and within the keratinized tissue will expose the top of the implant. The cover screws will be removed.

An Astra Tech Zebra healing abutment of the appropriate length will be placed and torqued to 20 NCm in each of the implant fixtures. The healing abutment should extend 2mm above the soft tissue. Sutures will be placed as needed. The mandibular denture must be relieved in the area of the healing abutment to allow complete seating and normal occlusion of the denture prostheses.

The soft tissue will be allowed to heal a minimum of 4 weeks. The patient will be provided oral and written post-operative instructions.

Prosthetic Protocol-Post Surgical

- All restorative patient care will occur within the Predoctoral Implant Clinic (room 311)
- The diagnostic assessment and treatment plan must be reviewed with an instructor prior to any restorative appointments.

- Denture Relief/Relines
  - A soft or hard reline of the denture adjacent to the surgical site may be required depending on the extent of the implant surgery/alveolar ridge reduction. If needed, an initial soft reline must be completed no more than three weeks after the initial implant placement. The patient must be scheduled in the Predoctoral Implant Clinic for this procedure. The implant faculty will determine if a soft reline is needed at this stage, and if a hard reline will be needed prior to the final attachment completion.
  - Relief of the mandibular denture in the area of the Zebra healing abutments will be needed to allow complete seating and normal occlusion of the denture prostheses. This should be scheduled in the Predoctoral Implant Clinic (room 311) on the same day the healing abutments are delivered.

- Final Prosthetic Abutment Placement
1. The Zebra healing abutment will be removed and a Locator abutment of appropriate length placed, extending 2mm above the soft tissue.
2. The abutments will then be torqued to 25 NCm.
3. A localized, direct acrylic reline technique will then be used to pick-up the Locator abutment in the mandibular denture. All excess material will be trimmed and the denture polished.
4. Post abutment insertion instructions will be given to the patient.

❖ Maintenance and patient responsibility

◊ Recall and assessment will be as follows:

   - One week
     • Any adjustments to the reline area
     • patient comfort and satisfaction
     • tissue health adjacent to the abutment areas
     • Attachment integrity/adaptation
     • occlusion
   - Three months-Same as above
   - Six months-Same as above
   - Annually-Same as above, in addition to checking need for attachment replacement

◊ Patients with implant-supported overdentures with attachments require regular maintenance within the Predoctoral Implant Clinic. Patients will be responsible to cover the expenses associated with maintenance including but not limited to replacement of attachments, adjustments, repairs, and relining. Patients will be responsible for the fees associated with any maintenance radiographs.

Critical Aspects

❖ All Completely Edentulous Patients Must Have an Implant Consultation
❖ All Implant Consultations-Predoctoral Implant Clinic-Room 311
   o Must obtain BEFORE treatment plan approval
   o Schedule with dental assistant in room 311
❖ Diagnostic Checklist
   o Must be completed BEFORE implant consultation
   o Must be signed by prosthodontic faculty AND surgical faculty
❖ Implant Requests
   o Must be at least 2 weeks PRIOR to implant surgery
   o All implants and other parts used must be obtained from Predoctoral Implant Faculty
❖ Surgical Guides Must Be Approved by Restorative and Surgical Faculty Prior to Implant Surgery
❖ Students Must Attend ALL Implant Surgical and Restorative Appointments
❖ Maintenance and Recall Appointments Must Be Scheduled at the Specified Time Intervals
UIC College of Dentistry Required Reading Materials for Implant Care


![Contemporary Implant Dentistry book cover]

2. Blackboard Website: [PIP 101 Predoctoral Implant Clinic](#)-contains all policies, procedures and protocols for the Predoctoral Implant Clinic