DEPARTMENT OF RESTORATIVE DENTISTRY

IMMEDIATE COMPLETE DENTURE PHILOSOPHY

1. Definitions

CID - conventional immediate denture (extraction of posterior teeth first; after healing an immediate denture is then fabricated, the denture is relined and used as the definitive denture);

IID - interim immediate dentures (immediate denture with inexpensive teeth and/or posterior acrylic blocks; after healing is complete, a new denture is fabricated as the definitive prosthesis);

IOD - immediate overdentures. (see tooth supported overdenture philosophy)

2. Advantages of immediate complete dentures

a. Patient appearance
b. Muscle support and VDO
c. Less post-operative pain
d. Duplication of existing teeth (if their position is acceptable)
e. Less adaptation problems
f. Can be relined with tissue conditioners

3. Disadvantages of immediate complete dentures

a. Modified final impression methods
b. Errors in centric relation record
c. Errors in the arrangement of the anterior teeth (esthetics)
d. May require more appointments and be more expensive
e. Post-operative discomfort for the first several days
f. Denture reline is indicated in most cases

4. Contraindication for immediate complete dentures

a. Patient with poor health or who are considered surgical risks
b. Patient who are uncooperative or who are unable physically or mentally to cope with immediate dentures. For these patients, extractions in a controlled setting, followed by six months of tissue healing and conventional dentures procedures is preferable.

5. Explanations to the patients regarding limitations and expectations

a. Patient must be advised of the potential difficulty in transitioning from a dentate situation to a completely edentulous one
b. Probable use of tissue conditioner and/or adhesives to improve retention and stability of the immediate denture
c. Discomfort during wearing of the dentures
d. Temporary difficulty in eating and speaking with the dentures, frequent lack of stability
e. Unpredictable esthetics of the dentures
f. Increased salivation, new chewing sounds, possible gagging while wearing the dentures
g. At the time of delivery, the dentures may not fit when preparing to be inserted. Patient may have to be sent home without the dentures
h. Patient must NOT take out immediate dentures for the first 24 to 48 hours
i. Immediate dentures may require that a definitive new set of dentures will need to be made.

j. Fees for tissue conditioning, relines, adjustments or a new set of dentures are the patient's responsibility.

6. **Implant care for mandibular overdentures**
   
a. During the initial appointment, all immediate denture patients must be advised about the benefits of having two implants placed in the mandibular arch after the fabrication of their maxillary and mandibular dentures. All potential mandibular immediate denture patients must have an implant screening appointment in the pre-doctoral implant clinic – room 311 (Mon, Wed, Thurs, Fri) prior to any treatment planning or treatment. Scheduling is done using Axium or by contacting the Predoctoral Implant Clinic dental assistant.

b. The importance of considering two implants for the mandibular arch must again be reviewed with the patient following completion of immediate denture therapy by the student and clinical faculty. The patient should be encouraged to proceed with implant therapy. Patients previously approved for implant therapy during the diagnostic phase and desiring implant supported care should be referred to proceed with detailed evaluation, assessment, and care, following the established Predoctoral Implant Protocols (posted on Blackboard Site).

c. Immediate implant placement (placement of the implant at the time of tooth extraction) for implant supported mandibular overdentures is not performed in the Predoctoral Implant Clinic unless determined necessary and approved by the Predoctoral Implant Director.

7. **Sequence of clinical procedures – All clinical procedures must be supervised by the same clinical instructor.**

   a. Basic diagnostic procedures:
      - review of the patient’s chief complaint
      - review of the medical and dental histories
      - intraoral examination with complete radiographic evaluation
      - oral cancer screening examination
      - full periodontal evaluation and/or periodontal consult with charting of probing depths of the remaining teeth
      - endodontic evaluation if immediate overdentures are considered;
      - oral surgery consultation regarding multiple extractions, tori removal and alveoloplasty (if indicated)
      - preliminary impressions, diagnostic casts and their mounting
      - evaluation of the existing prostheses if present

   b. Treatment plan presentation and final decision is made with regard to which type of immediate denture option would best work for the patient.

   c. Oral surgery
      - extractions of the posterior teeth followed by four weeks of healing (CID/IOD)

   d. New preliminary impressions and diagnostic casts (CID/IID/IOD) of the existing oral condition.
e. Fabrication of custom trays
   - TRIAD custom impression trays are prepared for the selective pressure final impression technique. A wax spacer must cover all of the tissue undercuts, edentulous secondary bearing and relief areas (one sheet of baseplate wax), and the remaining anterior teeth (two sheets of baseplate wax).
   - Wax spacer must extend 2mm short of the outline of the custom tray. The custom tray is extended 2mm short of the depth of the vestibule or to the border between attached and unattached mucosa, to the vibrating line (maxillary tray) and must cover all of the supporting oral tissues (including retromolar pads).

f. Border molding
   - is performed sequentially by quadrants, using green stick compound (Kerr, working temp. 123 degrees) with the wax spacer “in place.” Border molding can be achieved actively (by physiologic movements of the patient's limiting oral structures) and/or by manual manipulation of the patient's limiting oral structures. If necessary, the thickness of the border-molded labial denture border is adjusted to approximately 2-3mm.

g. Final impressions (full arch single tray)
   - are made using PVS impression material (light body) after the wax spacer is removed.
   A relief hole in the maxillary custom tray is made with a No. 8 round bur in the area of the palatal rugae along the palatal suture.

h. Pouring of final master casts (CID/IID)
   - completed master casts should meet all the criteria described for complete dentures.

i. Posterior wax rims are fabricated, facebow transfer obtained, vertical dimension of occlusion and registration of centric relation determined (CID/IID/IOD), and master casts mounted by following all of the criteria described for complete dentures.

j. Set up of posterior teeth, clinical try-in (CID/IID/IOD)
   - Both the instructor and patient’s approval of the trial denture try-in are necessary prior to sending the completely festooned final set-up to the laboratory for processing. The “Denture Acceptance Form” must be signed.

k. Complete Root Canal Therapy for any overdenture abutments (IOD)

l. Processing of the dentures (CID/IID/IOD)

m. Prepare overdenture abutments as indicated (IOD), extract remaining teeth, osteoplasty with use of the prepared surgical template (as predetermined with the mounted casts), delivery of the dentures (CID/IID/IOD).

n. Home care instructions are given to the patients at the time of denture delivery.

o. Post-operative care at 24h, 48h, one week, use of tissue conditioning if necessary.

p. Laboratory reline or new complete dentures are made 6 months to one year after initial delivery.

Text reference:
Zarb, GA, Bolender, CL:
Prosthodontic Treatment For Edentulous Patients
Complete Dentures and Implant-Supported Prostheses
12th Ed., CV Mosby Co., St. Louis, 2004