Denture Relining & Rebasing

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DEFINITIONS:

- ✍ Reline: the procedure used to resurface the tissue side of a denture with new base material, thus producing an accurate adaptation to the new denture foundation area.

- ✍ Rebase: the lab process of replacing the entire denture base material of an existing prosthesis.

- ✍ Remount: quick way to eliminate occlusal errors. Impression ✍ casts ✍ articulator ✍ eliminate errors. If Balanced/Lingualized occlusion is desired, ensure not tipping denture.

RATIONALE:

- ✍ Residual ridge resorption leads to spatial reorientation of the dentures on their supporting tissues and occlusal surfaces. Consequently, changes in circum-oral support and patient appearance ensues. Changes in occlusal relationship trigger more adverse stresses on supporting tissues ✍ more resorption (vicious cycle).

- ✍ Reline: When *minimal to moderate changes* without affecting the occlusal or esthetic (lip & face) relationships are evident. A thin impression material layer compensate for the basal seat changes.

- ✍ Rebase: When *extensive changes* occur the process compensates for reduced supporting tissue AND reorientation of the dentures' vertical & horizontal position in the mouth. Often a thinner palatal section in the maxillary denture (lab). Also to replace the entire base material when discolored or too light or dark or exhibits porosity after processing.

CLINICAL CHANGES:

1. Loss of retention & stability
2. Loss of VDO
3. Loss of support for facial tissues
4. Incorrect occlusal relationship
5. Reorientation of occlusal plane

TYPES OF RELINERS:

1. Temporary reline
2. Permanent reline:
    a. Hard
    b. Soft

DIAGNOSIS:

- ✍ Loosness (loss of retention) may be attributes to:
    1. Built in occlusal errors (uneven occlusal contact) with diffuse irritation:
        a. Discontinue use of denture for 1-2 days (if socially possible) before a clinical remount for adjustment without relining.
        b. Remount: quick way to eliminate occlusal errors. Impression ✍ casts ✍ articulator ✍ eliminate errors. If Balanced/Lingualized occlusion is desired, ensure not tipping denture.

2. If retention remains to be compromised ✍ relining.
3. If all the clinical changes are noted (Vdo, occlusion, retention, support, esthetics) along with inflammation ✍ need a reline/rebase at the correct VDO followed by a remount.

RELINE/REBASE PROCEDURE:

1. Render tissues in a helthy status by tissue conditioning to reestablish esthetics, orientation, VDO & CO (10-14 days).
2. Reline techniques:
   A. Static Impression technique: Dentures used as custom tray and seated with a lining impression material at the CO. (CO = correct occlusion?)
      ✍1.5-2mm resin material is removed esp large under cuts, and denture periphery relieved to allow a flat border. Relief holes made. Border molding with compund or polyether, before a wash is done. Denture is flasked and material is removed, before a new mix is packed and processed.

      I. Closed mouth
         ✍ More accurate
         ✍ Exsiting CO or a recorded CR is utilized to seat dentures which are used as a custom tray for a lining impression material.
         ✍ Occlusion can be corrected earlier in the preliminary stage or stabilized using stops & recorded,
         ✍ Don't want VDO to change (may happen if using too much material)

   B. Functional Impression technique:
      ✍Reduce overextended flanges or border mold if underextended and utilize functional impression material for the reline. Allow for an initial phase of conditioning if tissues are abused.
      ✍When healthy, a fresh mix of material is loaded and mandible is guided to a retruded position. Material will flow to conform with the anatomy of the tissues is poured before material becomes fully elastic. May need to use tissue stops, like compound. After flasking, a thin resin layer is shimmed to improve bond, before processing. Clinical remount & occlusal adjustment if needed.

   C. Chairside: utilizing acrylic or plastic materials.
      ✍Disadvantages include burn, bad odor and porosities.

In Lab:

1. Break Mn denture
2. Put back together, reinforce with sticky wax
3. Pack undercuts with pumice/water
4. Mix patty, seat denture on patty
5. Open fractured area (or create grooves) ✍ repair with acrylic (salt & pepper)
6. Pressure pot