DENTURE INSERTION, ADJUSTMENT AND SERVICING OF THE R.P.D.
INCLUDE:

~ adj. to bearing surface of the base.
~ occ. Interference from framework.
~ adj. of occ. In harmony with natural and artificial teeth.
~ instruction to the pt.
~ follow-up services.
Introduction:

- Initial placement of R.P.D. should be routinely scheduled appointment, the R.P.D. should not be given to pt until:
1- denture base have been initially adjusted as required.
2- occlusal discrepancies have been eliminated.
3- and pt. education procedures have been continued.
the insertion and post insertion phase are equally important to the success of the treatment.
Because both the metal and resin parts of a R.P.D. are produced by casting methods, unfortunately, such procedures in the laboratory rarely eliminate the need for final adjustment in the mouth to perfect the fit of the restoration to the oral tissues.
(1) Adj. to bearing surfaces of the base:

- Should accomplished by the use of pressure indicating paste (PIP), which is displaced by positive tissue contact, and will not adhere to the tissue of the mouth.
- It’s a mixture of euganol parts of a vegetable shortening and zinc oxide powder.
The paste should be applied in a thin layer over the bearing surface of the denture, and rinsed in a water so it will not stick to the soft tissue, and then digital pressure should be applied, the denture is then removed and inspected,
Any areas where pressure has been heavy enough to displace a thin film of indicator paste should be relieved and the procedure repeated until excessive pressure areas have been eliminated.
This procedure is particularly difficult to interpret when pt. exhibit xerostomia, because the paste can adhere to the tissue.

When relieving the pressure areas, we must considered whether the pressure is in primary, secondary, or non-supportive denture bearing area.
Pressure areas most commonly encountered are as follows:

- In mandible:
  - the lingual slope of the mandibular ridge in the premolar area.
  - the mylohyoid ridge.
  - the border extension into the retromylohyoid space.
  - the distobuccal border in the vicinity of the ascending ramus and external oblique ridge.
In maxilla:
- the **inside** of the buccal flange over the tuberosity.
- the **border** lying at the malar prominence.
- at the pterygomaxillary notch, where the denture may impinge in the pterygomandibular raphe or the pterygoid hamulus.
(2) Occlusal interference from denture framework:-

- The denture framework should have been tried in the mouth before a final jaw relation is established, and any such interference should have been detected and eliminated.

- Much of this need not exist if mouth preparations and the design of the R.P.D. framework are carried out with specific treatment plan in mind.
In any event occlusal interference from the framework should not ordinarily require further adjustment at the time the finished denture is initially placed.
(3) Adjustment of occlusion In harmony with natural and artificial dentition:-

- When opposing R.P.Ds. Are placed concurrently the adj. of the of occ. will parallel to some extend the adj. of occ. On complete denture.
When adjusting occ. On two opposing R.P.D. its best that one arch be considered an intact arch and the other one adjusted to it.

Which R.P.D. is adjusted first, and which one is made to occlude with it, is somewhat arbitrary, with the following exceptions:
a- If one R.P.D. is entirely tooth supported and the other has a tissue-supported base, the tooth supported denture is adjusted for final occ. With any opposing natural teeth. That arch is then treated as an intact arch, and the opposing denture adjusted to occlude with it.
b- if both R.P.D. are entirely tooth supported, the one that occludes with the most natural teeth is adjusted first.

c- if both R.P.D. are tissue supported, the maxillary one is adjusted first.
Methods of adjustment:

Adj. of tooth supported R.P.D. may be performed accurately by any of several intra-oral methods, While for distal extension R.P.D. is accomplished more accurately by use of an articulator. Because the later will exhibit some movement under a closing force.
(A) Occlusal adj. for distal extension R.P.D. :-

- Clinical remount procedure:
  Distal extension dentures positioned on remounting cast can conveniently be related in the articulator with new, non-pressure inter-occlusal records, using bite registration material such as (Alu wax, Moyoco beauty pink wax, silicone ..)
(B) Intraoral occlusal adj. for tooth-supported R.P.D. :-

- Accomplished by use of some kind of indicator, such as:
  - occlusal indicating wax.
  - articulation paper.
  - articulation ribbon.

- The wax is the more accurate than the others.
An occlusal indicating wax that is adhesive on one side, or strip of 28 gauge casting wax or other similar soft wax may be used.

It should always be used bilaterally, with two strips folded together at the midline, thus the pt. is not as likely to deviate to one side as when wax is introduced unilaterally. *(perforation of wax indicate interferences)*
- any interferences should be removed by burs, then, the anatomy of the artificial teeth should be restored for maximal efficiency by restoring grooves and spillways (food escape ways) to increase the sharpness of the cusps.
Instructions to the pt.:-

- Before the pt. is dismissed,
- the *difficulties* that may be encountered and
- the *care* that must be given the prosthesis and the abutment teeth must be reviewed with the pt.
The pt. should be instructed in the proper placement and removal of the R.P.D. The removal should be by the base, not by repeated lifting of the clasp arms away from the teeth with the fingernails, which may lead to its breakage.
The pt. should be advised that some discomfort might be experienced initially caused by the bulk of the prosthesis to which the tongue must be accustomed.
The pt. must be advised of the possibility of development of soreness despite every attempt to prevent its occurrence. Because pt. vary in their ability to tolerate discomfort, its best to advice every pt. that needed adj. will be made.
Discussion phonetics with the pt., because of the influence of the prosthesis on speech, particularly if excessive bulk, improper contour of the base, or improper placement of the teeth. The average pt. will experience little difficulty in wearing the denture. Most of the hindrances to normal speech will disappear in a few days.
Similarly, perhaps little or nothing should be said to the pt. about the possibility of gagging or the tongue’s reaction to a foreign object. Most pt. will experience little or no difficult in this regard, and the tongue will normally accept smooth, and non bulky contours without objections.
The pt. should be advised of the need to keep the denture and the abutment teeth **meticulously clean**. The mouth and the prosthesis should be cleaned after eating and before retiring. Brushing before breakfast also may be effective in reduction of bacterial count. The denture is cleaned by **small, soft-bristle brush with non-abrasive dentifrices**.
The elderly or handicapped pt. should be advised to clean the denture over a basin partially filled with water so that the denture impact will be less if the denture is dropped accidentally.
Daily brushing of the denture will prevent deposit of calculus for many pt., however any buildup of calculus should be removed in the dental office by the use of an ultrasonic cleaner.
The use of denture cleaners:

- They supplied usually in the form of tabs that dissolve in water
- Such as: Sodium bicarbonate, sodium hypochlorite (weaken and discolour, allergic!!), citric acid (lemons, peppermint, speamint and mannitol oils), others..
Generally the pt. advised to **remove the denture at night** to allow tissue rest, and should be placed in a **container filled with water** to prevent and subsequent dimensional changes. But the only exception that wearing R.P.D. at night when there is **bruxism**, which is more destructive, because the stress concentrate in fewer teeth.
Then the pt. is given an appointment after 24 hr for evaluation of the oral structure to the restoration and minor adj. if needed.
Follow-up Services:-

- Pt. need to understand that the support of prosthesis (Kennedy class I and II) may be change with time (assignment !!!), so periodic oral evaluation is important.
Questions ???