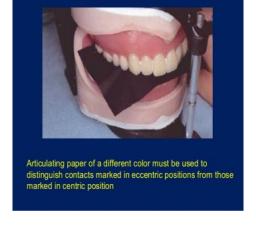
Lecture 12 Partial Denture Dr. shatha A. Wahid

Selective grinding

Defined as "modification of the occlusal forms of the teeth by grinding according to a plan. The modification of the occlusal forms of teeth by grinding at selected places marked by spots made by articulating paper, or marked by parts of the teeth cutting

through a thin layer of wax placed over the teeth".



Correction of occlusal errors:

Two methods are generally used in correcting errors due to processing changes, in both, the occlusal surfaces of teeth are altered by selective grinding:

- 1. Intra-oral (inside the patient's mouth).
- 2. Extra-oral (on the articulator in the laboratory).





Disadvantages of intra-oral method correction:

- 1. It is difficult to see the errors because the soft tissues will be distorted and obscure the errors.
- 2. The denture bases will be shifted to the underlying bone there are errors in occlusion due to the resiliency of the soft tissues.

Lecture 12 Partial Denture Dr. shatha A. Wahid

- 3. The articulating paper marks are likely to be incorrect due to the presence of the saliva.
- 4. The centric jaw position depends entirely on the ability of the patient to place and move the jaw correctly.

Advantages of extra-oral (on the articulator) correction:

- 1. More visible.
- 2. Easily located.
- 3. Easily corrected by selective grinding.
- 4. The articulating paper marks can be quite easily made on dry teeth.
- 5. Correct away from the patient thus there is a psychological advantage.

Articulating paper and wax sheets can be used to detect premature contacts, although it is preferable to use a wax sheet because premature contact will cause the cusps to penetrate through the wax indicating heavy contact is present.

An alternate method is to correct the occlusion before removing the dentures from the cast, as follows:

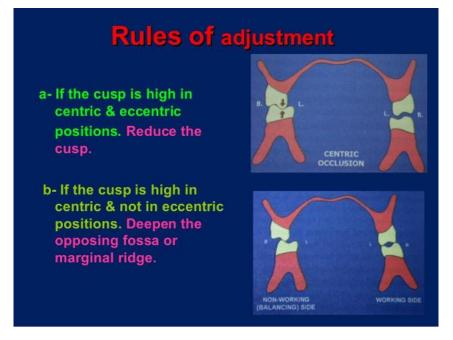
- 1. Replace the upper and lower mounting casts and dentures on the articulator. If processing changes in occlusion have occurred. They must be corrected.
- 2. Re-established the vertical dimension of occlusion at this time, an opening in the vertical dimension can be noted by the corresponding opening in the relationship of the incisal guide pin to the incisal table. The pin should contact the table.
- 3. Refine and equalize the centric occlusion.
- 4. Perfect the working and balancing occlusions.
- 5. Correct the protrusive occlusion.

Lecture 12 Partial Denture Dr. shatha A. Wahid

Rules for selective grinding:

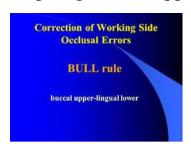
1. Never grind a centric cusp tip unless it contacts prematurely in all excursions of

the mandible.



Always grind the opposing fossa.

2. Utilize the **BULL** rule when perfecting **working occlusion** grind the **buccal cusp ridges of the upper and the lingual cusp ridges of the lower**.





When grinding to perfect **balancing occlusion** never grind the interfering cusp tips but grind the **cusp inclines**.

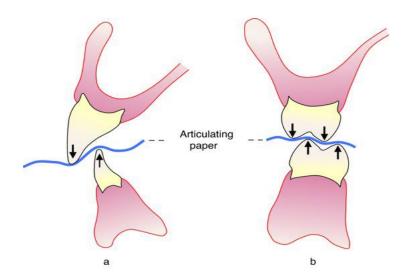
4. In correcting protrusive interference in the anterior teeth grind on the labial portion of the incisal edges of the lower teeth and the lingual portion (palatal surfaces) of the upper teeth.

For interference in the posterior teeth reduce the upper buccal cusp slopes and the lower lingual cusp slopes.

In protrusive balance, the anterior teeth should make incisal edge contact at the same time that the tips of the buccal and lingual cusps of the posterior teeth contact.

- A. If the anterior teeth have heavy contact with no posterior contact:

 Reduce the labioincisal surfaces of the lower teeth and palatal surfaces of the upper teeth.
- **B.** If the posterior teeth have heavy contact with no anterior teeth contact: Reduce distal inclines of upper cusps and mesial inclines of lower cusps.



THANK YOU