**Lec.15 Finishing &polishing** Dr.Makarem Almomen

 **complete denture**

**Finishing:** finishing of complete denture consist of perfecting the final form of the denture by removing any flash(excess) of acrylic resin at the denture border, any flash & stone remaining around the teeth & any nodules of acrylic resin on the surfaces of the denture base resulting from processing.

**The flash**: is the acrylic resin that was forced out between the halves of the flask by the pressure applied during the processing procedure.

**The grinding & cutting instruments**:

Plaster knife

Acrylic Burrs

Acrylic stone burrs

**Instruments & materials used polishing**

Pumice

Rag polishing wheels

Felt cones

Brush wheels

Sand paper

**Procedure of finishing**: take care to preserve the border & contour of the denture during the finishing process. If the impression was correctly boxed &the trial denture was carefully waxed contoured into the form desired in the finished denture, little finishing will be necessary.

1. We remove the excess (rough finishing) by the use of finishing machine.
2. We remove the stone from inner surface of denture by sharp knife or lacrone (because the using of hand piece may destroy the fine details of inner surface of the denture and this will affect retention and stability of the denture).
3. The bubbles that present around the teeth can be removed by small round bur and attention must be taken not to touch the teeth
4. the posterior area of the palate has thinned to its proper thickness
5. we use acrylic bur to remove any excess from the outer surface of the denture and from the denture border but you must take in consideration not to reduce the thickness or height of border just only remove the excess, otherwise we affect or result in shortage of denture border.
6. We use the little finger in order to determine any sharpness or excess that may present on the inner surface and this case removed by using small round bur.
7. We use the stone bur in order to remove any roughness that create using of acrylic bur.
8. By using sand paper, we can obtain the finishing of the denture to be ready for polishing.

**Polishing**:

Polishing: it is a procedure by which we can obtain a shiny, glossy surface of the denture.

Every restoration that is placed in the mouth must be highly polished. This is necessary for three reasons:

1. Improve esthetic
2. For the comfort of the patient
3. To prevent food debris, saliva and plaque from adhering on the polished surfaces of the denture.

**Principles of polishing:**

1-The tissue surface of a denture is never polished as a polishing destroyers the details necessary for good fit & retention.

2-the polished surface extends just over the border, but the borders are not reduced in height or width during polishing.

3- care must be taken when using pumice(used as wet slurry) as this material is very abrasive & may obliterate the details placed on denture when they were waxed.

4-resin teeth have approximately the same hardness as the denture base, so polishing a denture with resin teeth requires some precaution not necessary with porcelain teeth.

5-when polishing, only the denture base & the teeth are not polished.

6- during the finishing & polishing we should minimize the reduction of bulk because this is cause warpage.

**Procedure of polishing:**

1-Smooth the labial, buccal, lingual& palatal external surfaces of the denture with wet pumice on a rag wheel running at slow speed, keep plenty of pumice on the denture surface & keep the denture moving at all time, press the denture lightly against the wheel.

2-polish the resin around the teeth with pumice & a brush wheel moving at slow speed, be careful not to remove previously developed contours.

3-wet muslin buffing wheel is used to polish the border, lateral & palatal surfaces of denture.

4-felt cones or small buff wheels may be used to polish the palatal portion of the upper denture. The choice of wheels or cones dependent on the shape of the palate.

5-if stippling is desired in the denture base & was not placed during the final waxing it can be added at this time using small round bur lightly stipple the denture base from the second premolar to the second premolar on the other side. Lightly pumice the stippling with a brush wheel at low speed.

6-next stage use of Tripoli (greasy material). This material is applied to dry muslin buffing wheel; this differs in that the polishing compound is applied to the wheel & not as pumice to the piece of work being polished.

7-after the denture completely polished with Tripoli, it will be scrubbed thoroughly.

8-final polish is placed on the denture with a (high shine) material. These materials composed of fine particles which impart a glossy surface to the work being polished.it is applied to a rag wheel in a similar manner as tripoli

9-store the polished dentures in water until they have been delivered to the patient with high gloss, compatible contour, & natural appearance, store the dentures in water all the time otherwise it will undergo dimensional changes & shrinkage.

Every new set of complete denture should be tested in mouth for tissue adaptation & retention & any pressure area or over extended borders should be indicated by using pressure indicated paste following that the dentist should be routinely remount them on the articulator from new centric relation record, making necessary correction before the patient is permitted to wear them home. This procedure created to correct any slight processing shrinkage of denture base, any tissue change or error in the impressions & occlusal discrepancies. Shortcuts should be avoided which will diminish the quality of the end product.

Notes: resin teeth must be covered or protected during pumice and rag wheel smoothing, otherwise teeth appear yellow because of loss of outer labial enamel shade.

Gingival crevices should be polished with a brush wheel and an abundance of wet pumice.

The denture is stored in water until the delivery of dentures to the patient.