Prosthodontic Complete denture



Lec. 16 WAXING UP

Dr. Zeena Farhan

WAX CONTOURING (FESTOONING) (waxing up)

the natural tissues that are being replaced by the denture.

- ✓ These carvings are made in wax after the teeth have been arranged.
- ✓ The <u>term festooning is used</u> to <u>differentiate waxing a denture base from making wax patterns for cast metal restorations.</u>



- ✓ To produce a <u>pleasing natural appearance</u>.
- ✓ To aid in retention and stability of the denture.
- ✓ Prevent chronic biting cheek and lips
- ✓ Carving a denture base <u>to simulate natural gingive</u> is much simpler than attempting to induce contours that may make the denture looks artificial and difficult to keep clean.
- ✓ One of the most common errors in festooning is to make the interdental papilla non- existent, or too small. This provides a space between the teeth into which food tends to pack, and also makes the denture difficult to polish.

> Procedure:

- ✓ The casts are removed from the articulator.
- ✓ Strip of base plate wax is placed from the gingival third of the teeth to the peripheral border. The palatal surface of the maxillary denture is covered with a layer of base plate wax of 2mm thickness.
- ✓ Carving the gingival margin should be carried out with a knife held at 45° angle to the cervix of the teeth to give clean cut in the wax.
- ✓ The <u>wax is trimmed and contoured to simulate the gum tissues</u> from the labial, buccal and lingual surfaces.
- ✓ The <u>surface of the wax is rubbed with a piece of moist gauze</u> to give high polish.
- ✓ The <u>surfaces of the teeth must be cleaned with wax solvent</u>.
- ✓ <u>The trial denture</u> is replaced on the articulator to check the occlusion.
- ✓ Over waxing the trial denture and grinding away large portions of the acrylic resin can
 - cause undersirable stresses, and warpage of the denture during these procedures.
- ✓ <u>Under contouring and thinning</u> of the base causes excessive dimensional changes during curing, <u>leaves minimal bulk for finishing and polishing</u>, and makes the <u>denture liable to early fracture in function</u>
- ✓ The most desirable procedure is to carve the trial denture as exactly as possible to the final shape and bulk in wax so that only minimal finishing and polishing are

required.

- ☐ Minimal palatal thickness should be 2.5 mm (two layers of base plate wax warmed and adapted to the cast).
- ✓ <u>Stippling the facial surface of the denture to simulate natural gums</u> can be easily accomplished by the application of a <u>stiff brush</u>.
- > Shape of the polished denture surface: Anatomic considerations
- > Maxillary denture:
 - ✓ The labial flange must be thickened to push out the lips for esthetic requirements.
 - ✓ The orbicularis oris when contracting to press the lips against the teeth does not affect the upper denture as much as it does with the lower because of the greater stability of the upper denture. The anterior portion of the maxillary denture must not be thick unless there has been excessive bone loss.
 - ✓ The buccal surface of the maxillary denture should be hollowed slightly with the concavity looking downwards and outwards so that the buccinator muscle when contracting may press the denture upward.
 - ✓ The interdental papilla must be flat or concave to provide natural appearance
 - ✓ Convex gingival roll then slight concavity before periphery of the denture this help to displace the buccal mucosa away from biting zone
 - ✓ <u>Buccal flange</u> should be <u>concave</u> in the second molar region <u>must be thin</u> with well developed ridges <u>to avoid striking of the coronoid process against the flange</u> when the mouth is opened <u>causing soreness of the cheeks or dropping of the denture</u>.
 - ✓ <u>Canine eminence</u>: must not be protruded (only slight protrusion taking the shape of root)
 - ✓ Palatal thickness (2.5 mm) to give space to the tongue If less lead to whistling if more lead to Lisping
 - ✓ Rugae area should be replicated to aid in S letter

Mandibular denture :

- ✓ The contour of the mandibular denture aids in its retention.
- **✓** In the anterior region, the facial surface is relatively straight.
- ✓ <u>The lingual surface in the premolar and molar region</u> is a <u>straight</u> or slightly concave
 - . A deep concavity in this area provides a space for the tongue to catch and lift the denture unintentionally.
- ✓ <u>In the posterior region</u>, the <u>facial surface faces upward and outward</u>. <u>This contour allows the buccinator muscle to lie against the denture</u>.
- ✓ Modiolus area : if overfilled ---- loss of retention

if underfilled ---- depressed & will not perform function