Try-in of complete dentures

Dec, 9, 2015

Objectives

- Review instruments and materials needed for the procedure.
- Objectives and procedures related to denture try in step.
- Basic guides to developing facial and functional harmony.
- Methods of correction of discrepancy in vertical relation or centric relation registration.
- Locating post dam area and cast preparation.

Instruments and materials

- 1. Patient's file
- 2. Wax dentures.
- 3. Articulator.
- 4. Bowl of cold water.
- 5. Bunsen burner.
- 6. Wax knife.
- 7. Sheet of modeling wax.
- 8. Lecron carver.
- 9. Indelible pencil.

Objectives of try in of the complete denture

- 1. To verify the vertical and horizontal relationships registered at bite registration step.
- 2. To check that the arrangement of the teeth is such that speech and mastication will be restored and to ensure that a pleasing appearance is obtained.

Basic guides to developing facial and functional harmony:

- 1) Vertical dimension of occlusion determined.
- 2) Horizontal relation of casts on the articulator has been verified for CR.
- 3) The appearance of the patient is studied and modifications are made in the arrangement of the teeth to obtain a harmonious effect with the patient's face.

Both dentures together:

Appearance
Centre line
Anterior plane

Verification of vertical dimension

The vertical dimension of occlusion and at rest must be given careful consideration because the final positions of the anterior and posterior teeth will depend to a great extent on the amount of space available vertically.

Verify VDR, VDO and calculate amount of FWS.

What if vertical dimension is incorrect?



Yes

An error in the VD of up to 4 mm can be adjusted by adjusting the Incisal pin and resetting the teeth according to the new vertical dimension

No

- · Teeth are to be removed from the lower denture.
- The upper denture and lower baseplate are reseated on the models on the articulator.
- The pin may now be adjusted to the required dimension and a wax occlusion rim constructed on the lower base to this height.
- The upper wax denture and lower occlusion rim are now returned to the mouth and a new CR may be established
- lower model to be rearticulated in its correct position with the articulator returned to zero.
- Reset the teeth.

Verification of Centric relation

After vertical dimension has been determined, CR is verified:

- 1) Intraoral observation of intercuspation.
- Observation of intercuspation when the mandible is pulled back by the patient as far as it will go and closure is stopped at the 1st tooth contact.
- 3) Any error in CR will be apparent when the teeth slide over each other. Especially, if anatomical teeth are used.

Reasons of inaccurate CR registration?

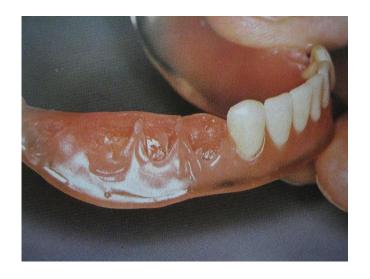
What if antero-posterior relation (Centric relation) is incorrect?

Once it is determined that the mounting is incorrect, a preliminary observation of esthetics is made.

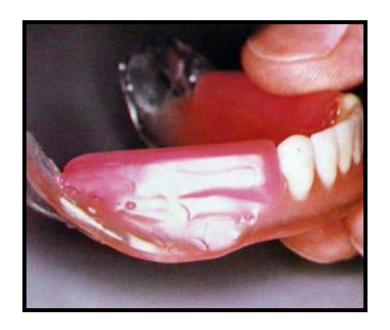
If the anterior teeth are not placed to support the lip properly, their positions are corrected. Then, vertical overlap of the anterior teeth is carefully noted.

Why is this important?

- Posterior teeth are removed from the lower rim and both occlusion rims are placed in the mouth.
- The selected recording medium is placed on both sides of the lower occlusal rim in the molar and premolar regions.
- Then patient is instructed to pull lower jaw back and close slowly until requested to stop and hold that position.
- The closure is stopped when the anterior teeth have the same vertical overlap as they had before the posterior teeth were removed. Thus, the vertical relation of the 2 jaws will not have changed.











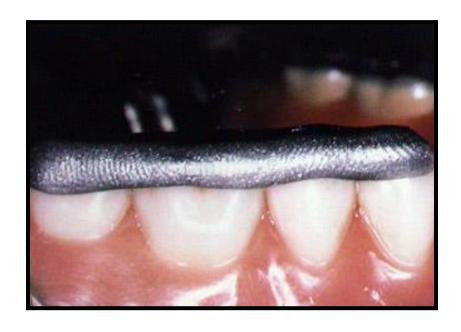
Check appearance

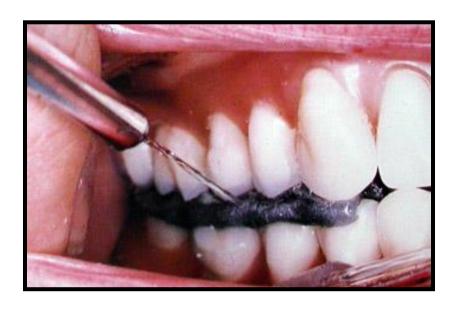
With the upper and lower wax dentures in position:

- I. Check the lip form to ensure that the upper and lower anterior teeth are in their correct positions.
- 2. Check the midline.
- 3. Check the orientation of the occlusal plane to ensure that it is not running down on either side and that the posterior teeth are arranged parallel to the ala-tragus line.
- 4. Check that the shade and mould of teeth are satisfactory.
- 5. Check the arrangement of the teeth to ensure that they give a pleasing appearance.

Check speech

Once the trial dentures are verified in regards to esthetics, phonetics and occlusion. A protrusive registration is made to set the proper condyler inclination on the articulator

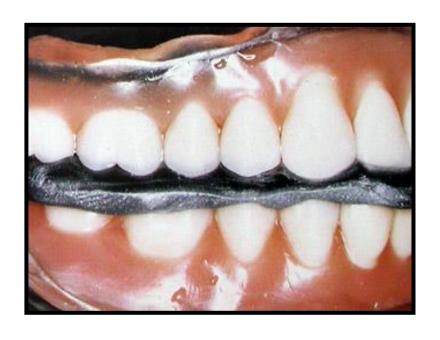


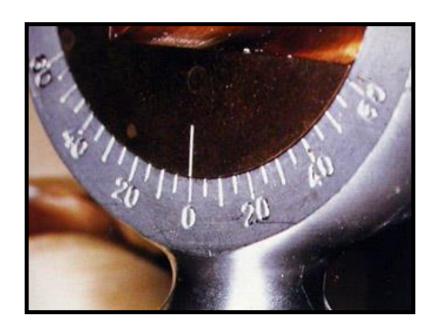


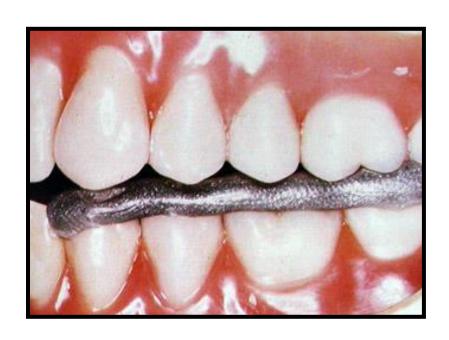


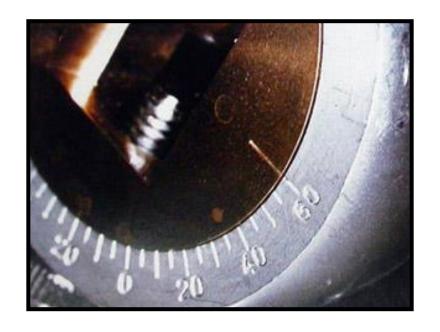


















Establishment of the posterior palatal seal

Posterior border of the denture is determined in the mouth and its location is transferred onto the cast.

A T burnisher, or mouth mirror, is pressed along the posterior angle of the tuberosity until it drops into the pterygomaxillary (hamular) notch.

The location of right and left pterygomaxillary notches are marked with an indelible pencil. On the median line of the anterior part of the soft palate are 2 indentations formed by coalescence of ducts known as the fovea palatinae.

They can be made more readily discernible by having the patient hold his/her nose and attempt to blow through it (Valsalva maneuver) this will accentuate the fovea palatinae and vibrating line

The vibrating line of soft palate, normally used as a guide to the ideal posterior border of the denture, usually is located slightly anterior to fovea palatinae. However, it may be on or slightly posterior to the fovea palatinae.

The slight deviation from these markings is estimated by having the patient say "ah" and then vibrate the soft palate.

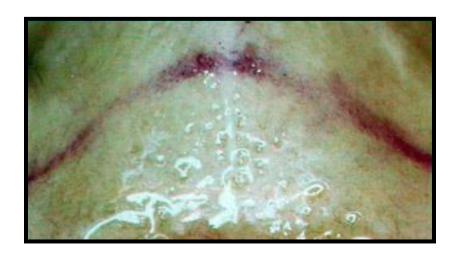
The dentist observes closely and marks the vibrating line with an indelible pencil. The 2 pterygomaxillary notches markings are joined to the median land mark.

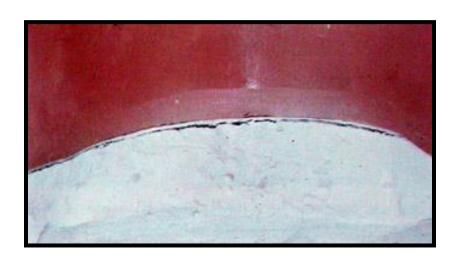
Trial denture base inserted, indeible pencil line will be transferred from the soft palate to the trial denture base and the excess baseplate is reduced to this line.

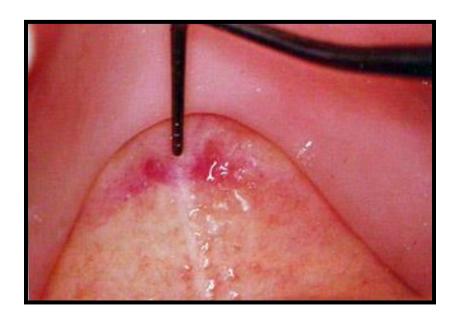
The trial denture base is placed on the cast and a knife or pencil is used to mark a line following the posterior limits of the baseplate.

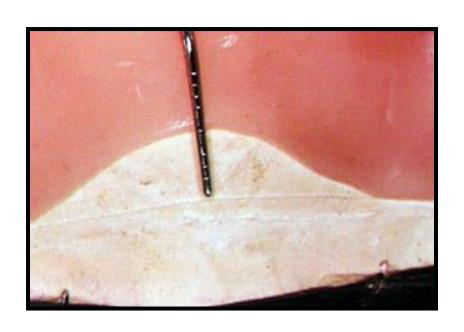
Beadline is drawn and carved 1-1.5 mm deep and 1.5 wide. Cast is carved using a large scraper to form the posterior palatal seal.

A posterior palatal seal should be carved into the maxillary cast. The case is returned to the lab for sealing of the trial dentures, investing and processing.

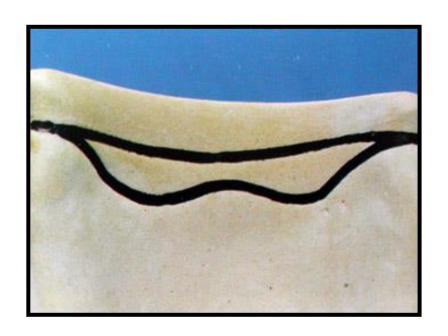




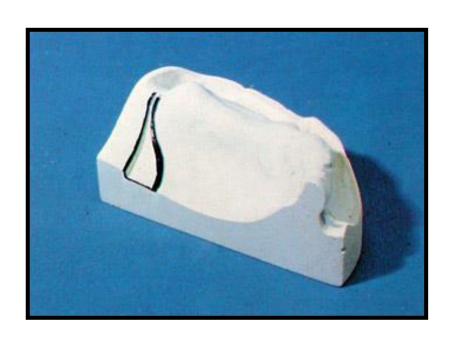












Patient acceptance of the arrangement of teeth

Patient must be given the opportunity to observe and approve the final arrangement of the anterior teeth at the try in appointment.

The dentures should not be completed until approval is obtained. Even when patients say that they "do not care how their teeth look", they must be given full opportunity to evaluate and approve the arrangement.

Patients often become extremely concerned with their appearance when they begin to wear the denture.

They should evaluate it by standing in front of a large mirror 3-4 feet away with the trial dentures in the mouth and given the opportunity to observe the dentures during normal conversation and facial expression.

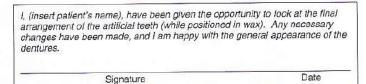


Figure 18-75 Patient's statement of satisfaction with the arrangement of artificial teeth.