



UNIVERSITATEA DE STAT DE MEDICINĂ ȘI FARMACIE
„NICOLAE TESTEMIȚANU” DIN REPUBLICA MOLDOVA

The trial denture stage of treatment.
Possible mistakes admitted at
definition of central jaws
relationships. Methods of their
prevention and elimination.

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Try-In verification or aesthetic try-in
is a preliminary insertion of removable denture wax-up to determine the fit, aesthetics, maxillo-mandibular relation.





Try-in verification involves the following procedure:

- A) Primary Evaluation.
- B) Preliminary Evaluation in Articulator.
- C) Evaluation in Mouth.





A) Primary Evaluation

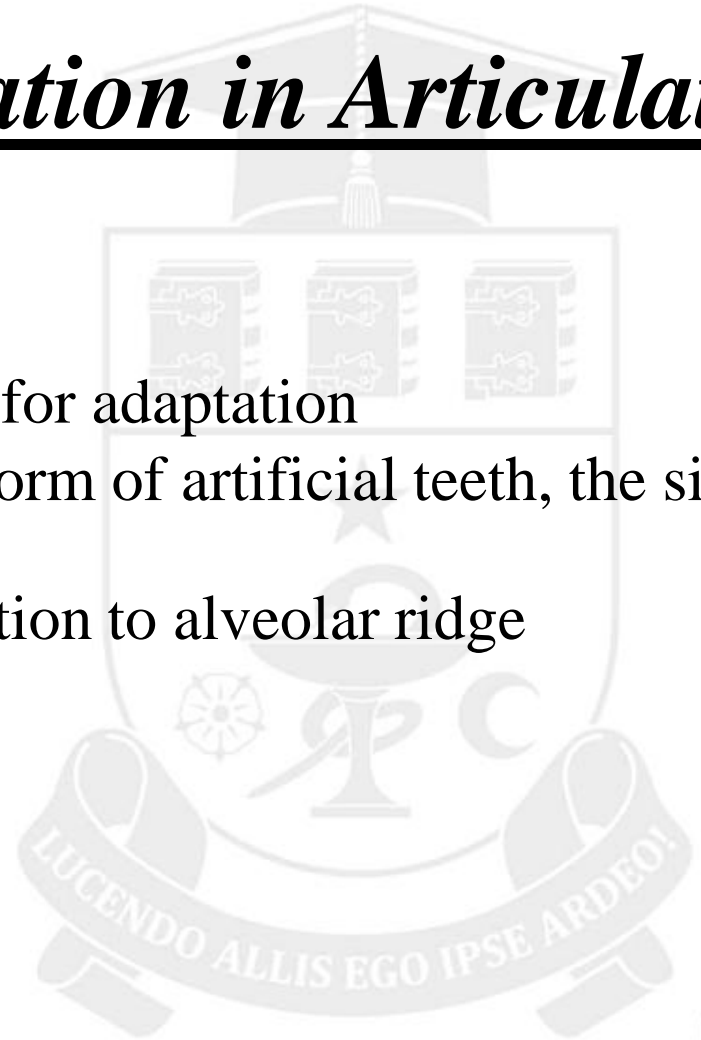
1. Check for adaptation of base plate on articulator.
2. Evaluation of occlusion.
3. Evaluation of vertical height.
4. Evaluation of polished surfaces.

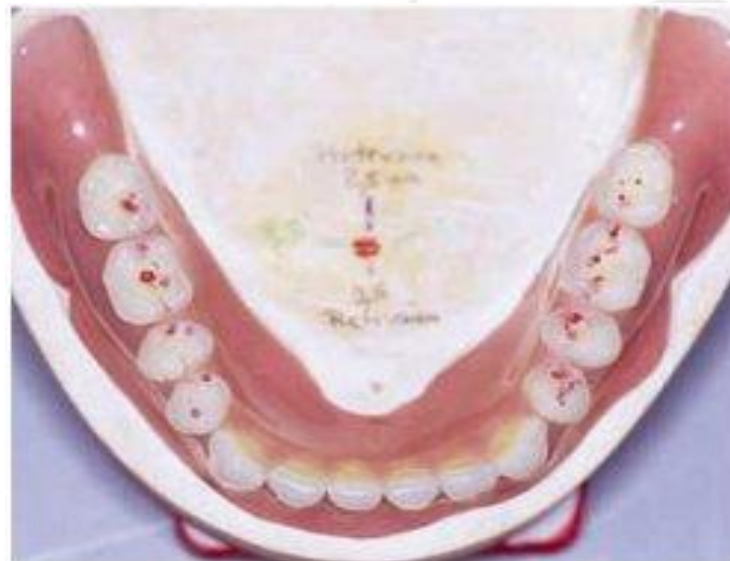
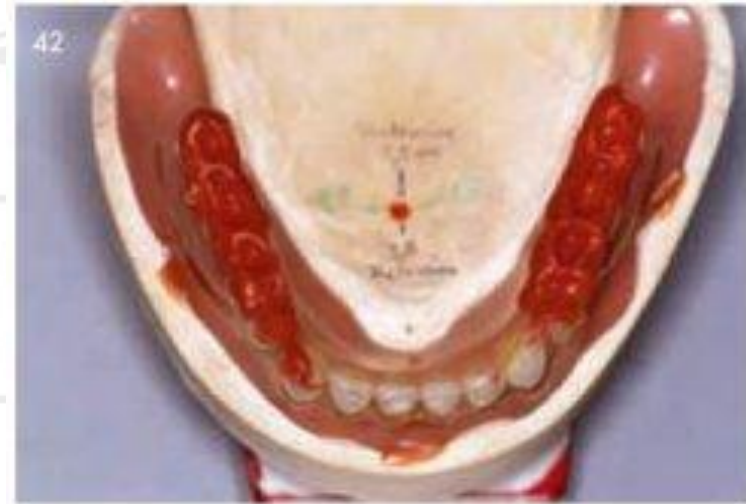




B) Preliminary Evaluation in Articulator:

- checking quality of models
- checking limits of denture
- evaluation of impression surface for adaptation
- examination of the colour, size, form of artificial teeth, the size of incisor overlapping
- checking position of teeth in relation to alveolar ridge
- evaluation of polished surface
- evaluation of occlusal surface

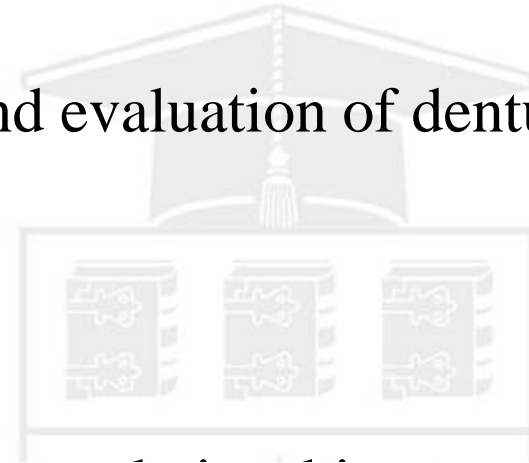






C) Evaluation of Individual trial Denture in the Mouth

1. Verification of denture coverage and evaluation of denture extension.
2. Evaluation of retention.
3. Evaluation of stability.
4. Evaluation of support.
5. Checking vertical component c
6. Checking horizontal componer
7. Evaluation of aesthetic.







Evaluation of Lip and Cheek Support

Incisal third of anterior teeth should be visible when the upper lip is at rest (low lip line). The middle third also be visible while smiling (high lip line).



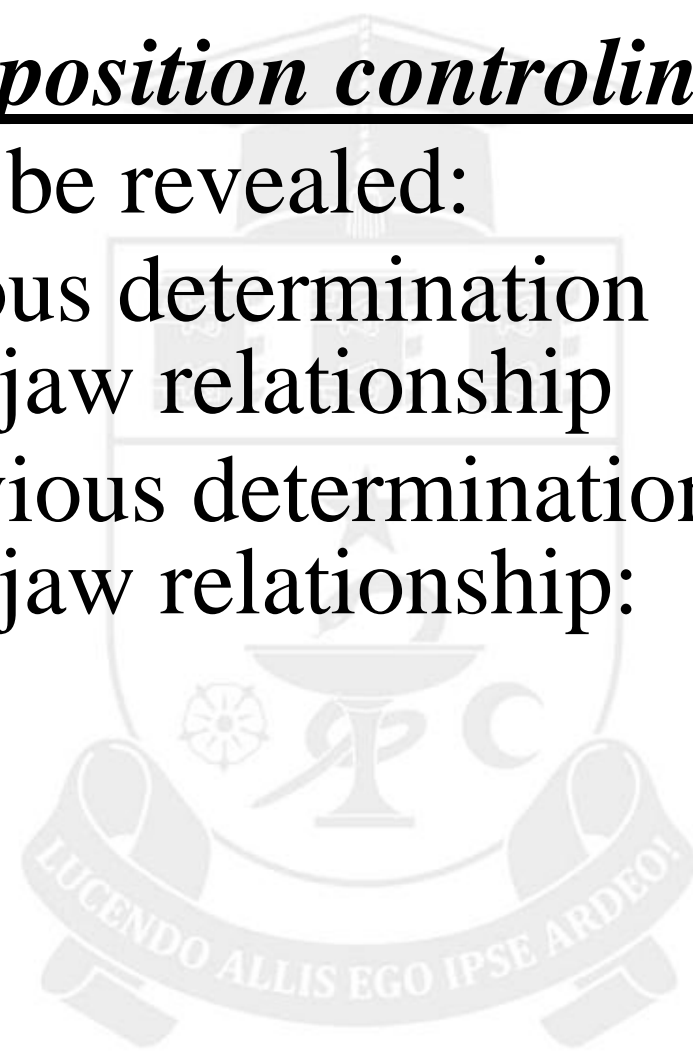


Checking the vertical component of jaw relationship

provides *physiologic rest position controlling.*

In this stage of trying can be revealed:

- a) Signs of correct previous determination
vertical component of jaw relationship
- b) Signs of incorrect previous determination
vertical component of jaw relationship:
 - increased
 - decreased





Checking the horizontal component of jaw relationships

After introducing lower and upper trial dentures the patient is asked to close the mouth putting frontal and lateral teeth in contact. The teeth should have maximum intercuspation.

If this condition is not satisfied a new registration of horizontal component of jaw relationship must be obtained.

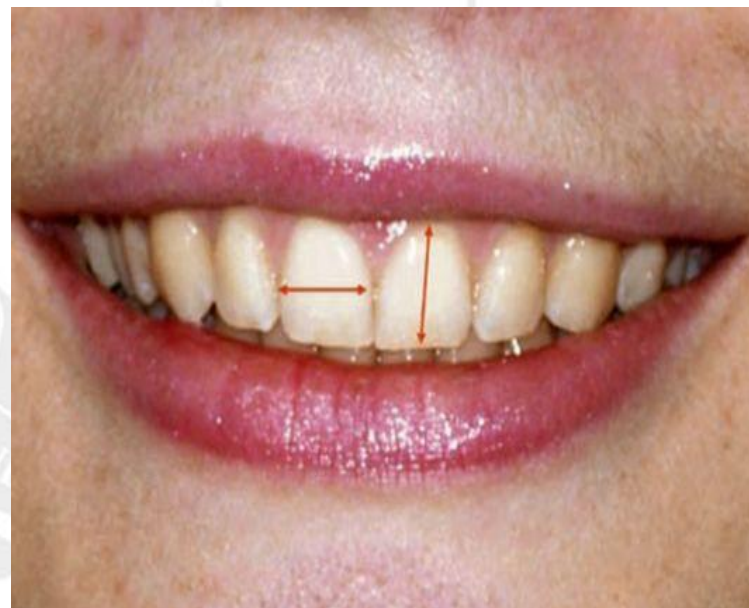
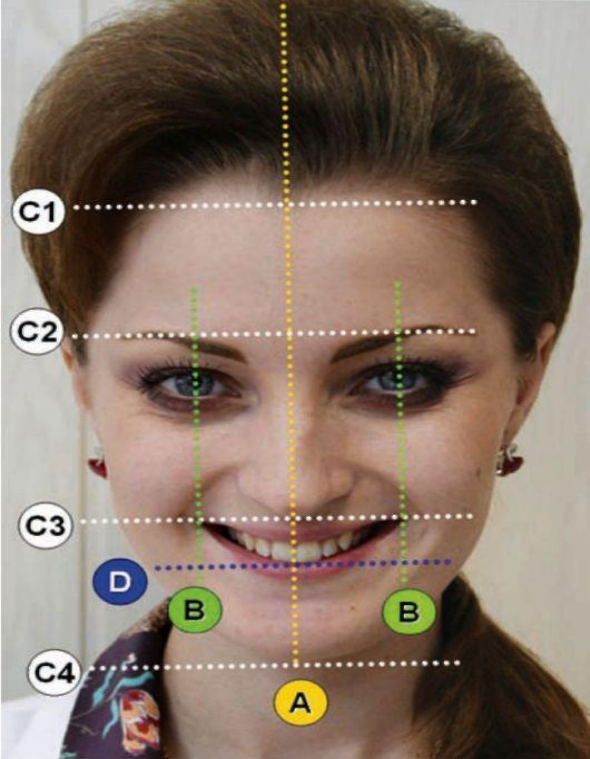


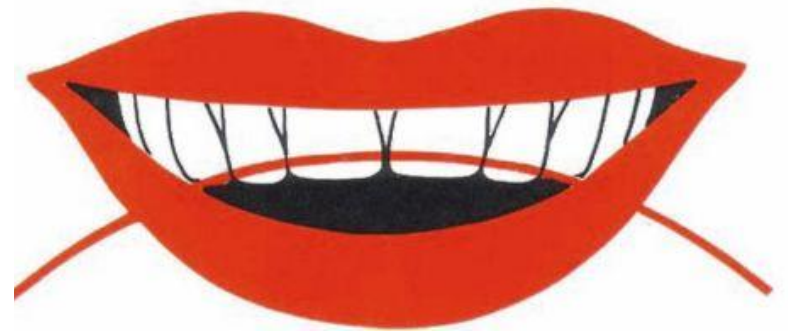
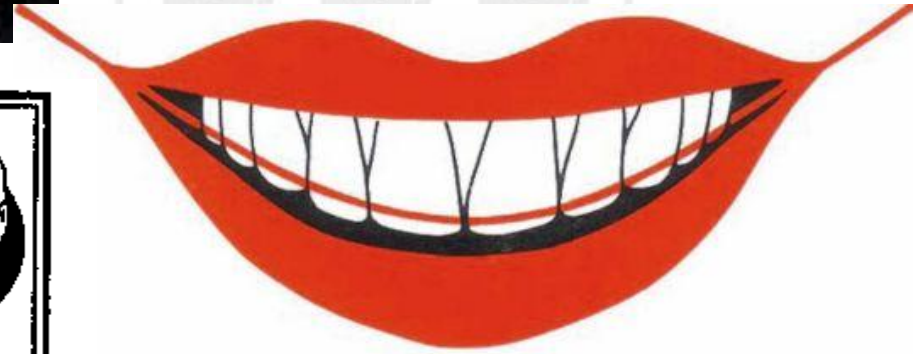
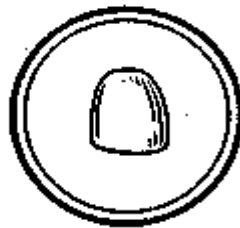
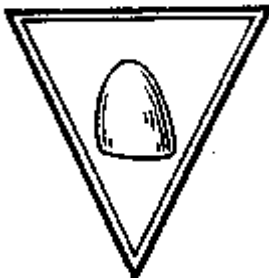
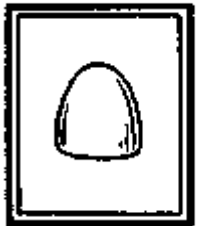
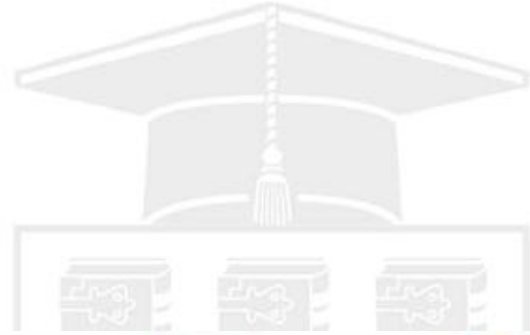
Checking aesthetics

is made in frontal and lateral view, with closed and in half-open mouth position.

The following features should be observed:

- if the dentures provide adequate support for the lips and cheeks of the patient
- if central line of the denture coincides with middle line of the face
- if occlusal plane in frontal area is correctly aligned to the interpupillary line and in lateral area – to the ala-tragal lines
- checking correspondance of colour, shape, size of artificial teeth to the colour of face, eyes, hairs
- checking interocclusal space size asking the patient to pronounce several words.







Possible mistakes at definition of intermaxilar relationships:

1. mistakes made **during vertical dimension of occlusion** determination
2. mistakes made **because of sagital or transversal mandible displacement**
3. mistakes made **because of displacement of occlusal rims**
4. mistakes made **because of displacement of wax bases from the prosthetic field**
5. mistakes made **because of deformation of wax borders**
6. mistakes made **because of compression of the mucosa of the prosthetic field.**



1. Mistakes made during vertical dimension of occlusion determination

1. Increasing vertical dimension:

- a) if upper teeth are put in correct position decreasing vertical dimension will be made from lower dental arch (removing artificial teeth and making new occlusal rim);
- b) if upper and lower teeth are put incorrect must be removed artificial teeth from both dental arches.

2. Decreasing vertical dimension:

- a) if upper teeth are put correct – on the lower will be put plate of soft wax and vertical dimension is determined again or complete removing lower teeth, making new occlusion rim and determination of Vertical Dimension;
- b) if upper teeth are put incorrect – removing upper and lower teeth, making new occlusion rims and determination of Vertical Dimension.



2. Mistakes at displacement of record base in sagittal or transversal plane

During testing the trial denture in position of centric occlusion **in case of displacement of the mandible forward** at previous stage in the frontal area **between incisors** will be **inocclusal space** characterised for prognaty. At the same time it will be observed **increasing the vertical height of occlusion** because of intercusps contacts in the area of lateral teeth.

In case of mandible displacement distally in **the frontal area will be the contact typical for progeny,** and **in lateral areas – increasing vertical height of occlusion.**



3. Mistakes made because of displacement of occlusal rims

Depending on direction of displacement (anterior, posterior) and situation of displacement (upper or lower jaw) will be discovered different changes of occlusion characteristic for sagittal displacement of lower jaw. In this case must be made new occlusion rims and new determination of intermaxillary centric relationships.



4 .Mistakes connected with displacement of occlusal bases from prosthetic field

can appear because of non uniform pressure on occlusal rims at the moment of connection of occlusal rims and fixation of centric jaw relationship. Clinically it is visible at testing trial dentures with the help of so called “spatulae test”.





5. Mistakes because of deformation of occlusal wax border and their correction

may **appear** during fixation of the centric interjaws relationships if the wax bases were not reinforced or made correctly. At setting the wax composition on the model the space between the gypsum model and wax composition and possible balancing of wax composition appear. At setting wax composition of trial denture in the oral cavity appear interocclusal space in frontal area. At the same time increasing vertical height of occlusion is found out. **Correction of this mistake** is done by making new occlusal rims and **repeated determination of the centric interjaws relationships**.



Imposing complete denture

Before imposing is made extraoral and intraoral examination of denture:

Extraoral – quality of edges of denture (must not be sharp), impression surface of denture (must repeat anatomical landmarks of prosthetic field), thickness of base denture (must be uniform), polished surface (must be smoothed).

Intraoral – fixation of denture and absence or presence of pain, degree of suction (pressing on left, after on right side of denture), examination of distal margin (Post Dam Area) pressing on oral surface of incisor in vestibular direction – displacement of denture in this area (Post Dam Area) indicated on shortening denture. In case of pronounced vomer reflex can be presupposed lengthening distal limit of denture. After this will be examined vertical and horizontal intermaxillary relationships making individual grinding (must be 26-48 contact points on occlusal surfaces of teeth). Phonetic examination is not sufficient at this stage because of discomfort in oral cavity created by complete denture presence.



Phases of adaptation to artificial complete denture

V. Kurleandski distinguishes 3 stages of adaptation to the complete denture:

I – irritating stage (from 5 days to 2 weeks)

II – partial inhibition (from the second day to the fifth day after complete denture setting)

III – total inhibition (within the first month after complete denture setting).





**THANK YOU
FOR
YOUR ATTENTION**

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