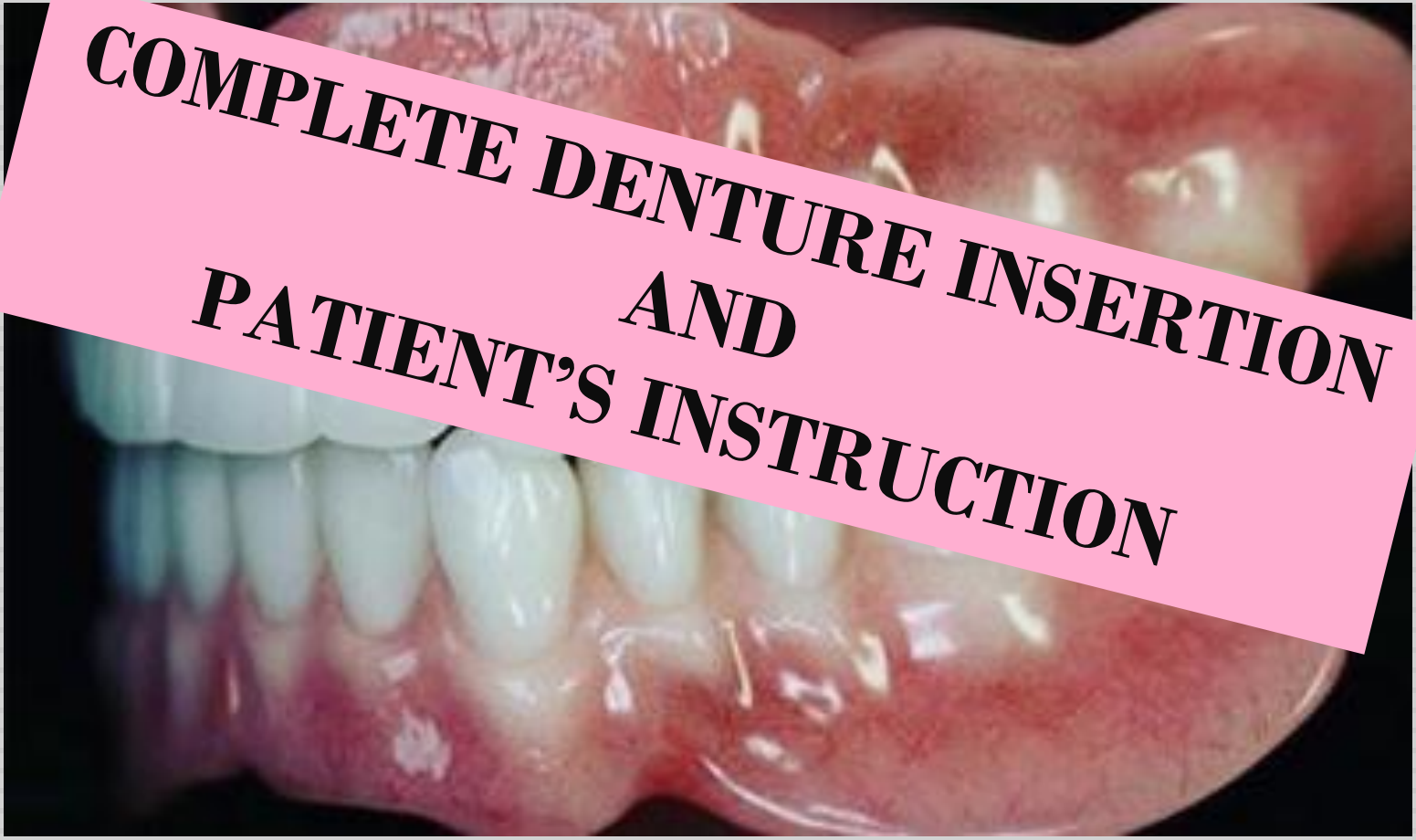

COMPLETE DENTURE INSERTION AND PATIENT'S INSTRUCTION

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outlines

- **Patient Education and Motivation**
- **CD Insertion Procedure**
- **CD Patient's Instructions**

Objectives of CD treatment

The finished denture must fulfill :

1. Physical needs required to perform adequate functions (mastication and speech) and to preserve the remaining oral related structures.
2. Physiological needs to maintain the health and comfort of the mouth and the TMJ and to improve the general systemic health.
3. Psychological needs to restore esthetics and to improve the general self-esteem of the patient.

- **Patient Education and Motivation:**
  - House Classification
  - Patient's oral and general conditions

- Dentist need to spend time in educating and recalling the patient for complete denture as it will lead to success of denture.
- *Words of encouragement are very important to ensure success.*
- *The dentist should inspect the patient's mental attitude from the beginning of treatment. In addition, it's the responsibility of the dentist to acquire about the oral and general (systemic) status of the patient to direct the patient expectance about the denture prognosis.*
- Patient's Mental Attitude: All patients have a "threshold of acceptability" that determines their response to denture insertion. This threshold acceptability differs according to the patient's mental attitude. The House Classification, given by Dr. Milus House of complete denture patients' mental attitudes is as follows:

House Classification:

1. The Philosophic Patient:

(i) Accepting of dentist and oral condition.

(ii) Ideal attitude for successful treatment provided the bio-mechanical factors are reasonable.

2. The Indifferent Patient:

(i) Little concern about oral health and dentist.

(ii) Treatment insisted on by a significant other.

(iii) Gives up easily

3. The Critical Patient:

(i) Finds fault with everything.

(ii) Directs the treatment.

(iii) Usually have poor health leading to poor personality.

(iv)Medical consultation advisable before treatment.

4. The Skeptical Patient:

(i) Previous bad experience with dentist/dentures.

(ii) Poor health and unfavorable oral conditions for fabrication of dentures.

(iii)Often have a series of personal tragedies.

Patient's oral and general conditions complicating use of complete denture:

Educating a prospective denture patient about his/her oral status and systemic conditions as they apply to his/ her is absolutely necessary.

1) Diabetes mellitus: Diabetic patients show an abnormally high rate of bone resorption with decreased tissue tolerance and delayed wound healing. Such patients should be informed about frequent oral examinations, denture adjustments and relines along with effective oral hygiene.

2) Arthritis: These patients should be made aware that occlusal relationship may change as a result of their disease and that limited jaw function may follow.

Patient's oral and general conditions complicating use of complete denture:

3) Anemias: Mucositis, glossitis and angular cheilitis decrease the tolerance to a foreign body in the mouth. Patients should be counseled about the diet and pharmacotherapy.

4) Neuromuscular disorders: Lack of neuro-motor skill and control can result in instability of the denture base. The use of a denture adhesive may be advised in this type of patients.

5) Menopause: Post-menopausal osteoporosis results in excessive alveolar bone resorption and chronic tenderness of oral tissues. This condition requires diet modification pharmacotherapy and use of soft liner.

Patient's oral and general conditions complicating use of complete denture:

6) Other conditions:

i. Patients who have problems where surgery is either contraindicated or surgery cannot be performed can complicate the use of dentures.

ii. Patients who cannot control tongue and jaw movements due to wasting or muscular incoordination.

iii. Macroglossia or microglossia can result in loss of peripheral seal and loss of retention and stability.

iv. Patients with lack of mental capacity to adjust to the treatment.

- **Denture Insertion Procedure**
  - Tools and materials required
  - methods

- Denture insertion represents the culmination of a series of carefully considered and exacting procedures. It is also the moment eagerly awaited by the patient, who has co-operated in both time and effort toward this event.
- Denture insertion appointment requires amply repaying the skill and training of the dentist and the patience of the patient.

Tools and Materials required:

- Articulator
- Pressure indicating (disclosing) paste (PIP)
- Rubber bowl
- mouth wash
- Hand mirror
- The finished Complete dentures
- study casts
- Straight handpiece and burs
- Occlusal indicating wax
- Articulating paper
- Mouth mirror
- napkin

Note: dentures should be soaked in water for 72 hrs prior to their insertion to remove majority of residual monomer.

Methods

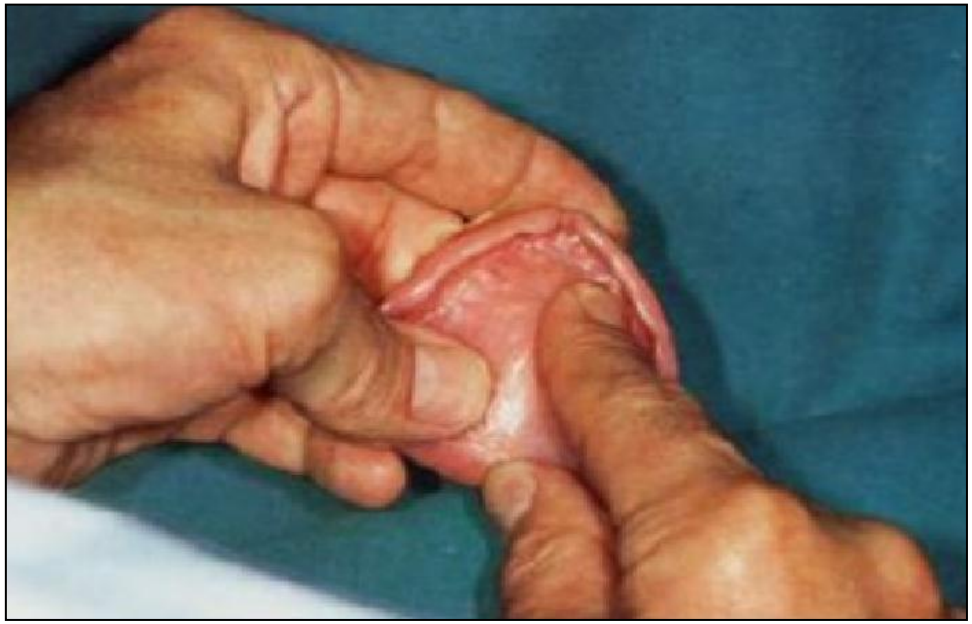
I- Extraoral examination of the finished denture prior to its insertion:

Before the insertion appointment, dentures are inspected to determine the following:

a) That the polished surfaces are smooth and devoid of scratches.

b) That no imperfections on tissue surface remain.

c) That the borders are sound with no sharp angles in the border areas.



Methods

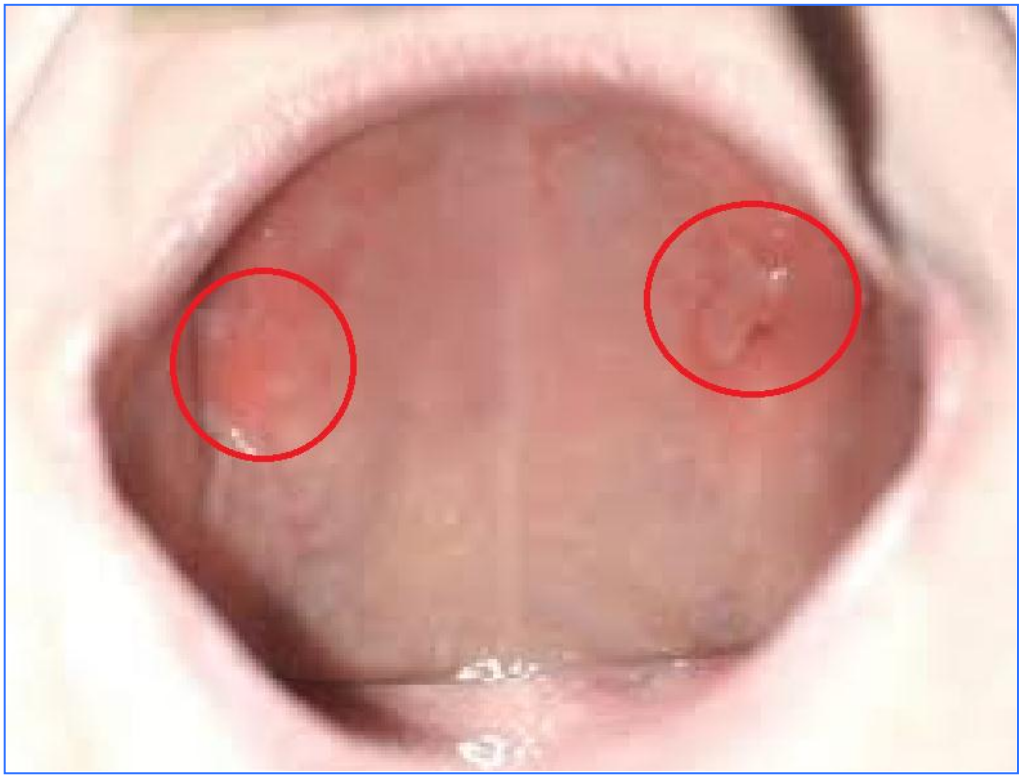
II- Intraoral examination of the finished denture :

a) Location and relief of pressure areas in denture base.
b) Identification and reduction of overextended borders.
c) Evaluation of retention and stability.
d) Evaluation of esthetics, facial contours and phonetic
e) Refinement of occlusion.

Location and relief of pressure areas in denture base:

Small areas of excess pressure can disrupt occlusal harmony or lead to ulceration that erodes patient acceptance of the prosthesis.

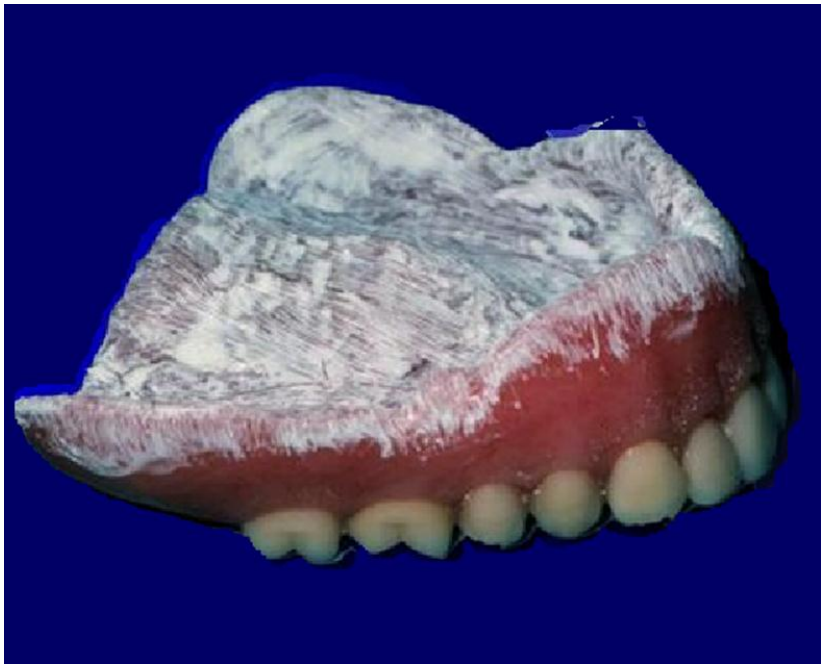
Mucosal ulceration due to pressure areas of maxillary denture



Location and relief of pressure areas in denture base:

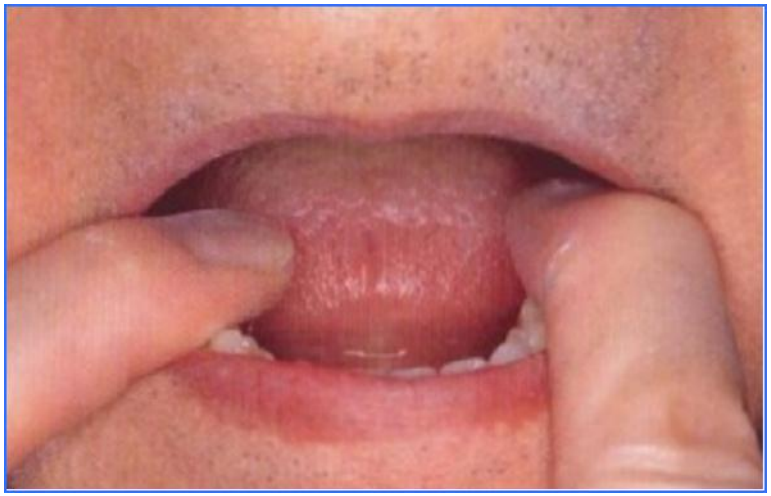
Procedure:

A)- Before inserting the denture, dry it, paint the entire tissue side with a thin coat of (PIP), leave streaks.

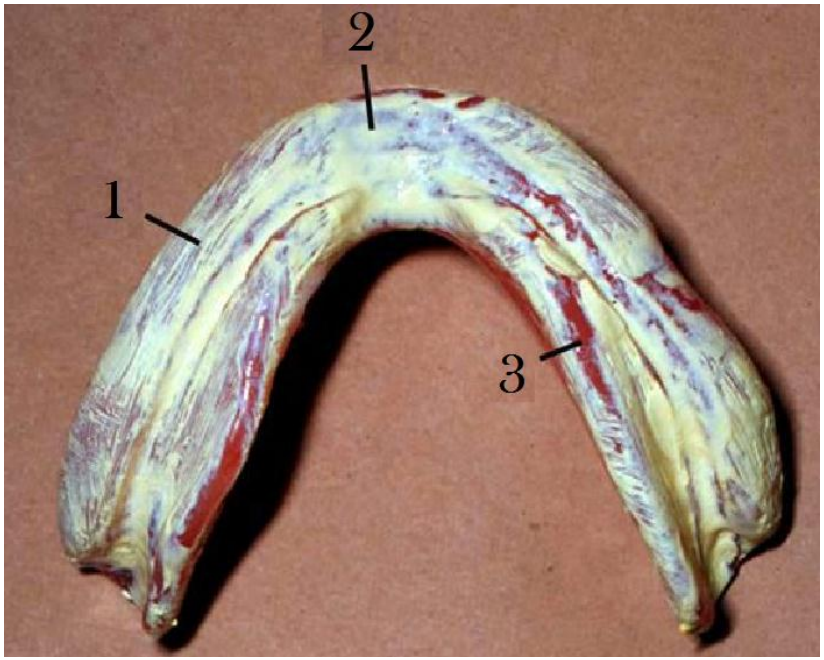


B) - Then insert the denture with gentle pressure and remove it.

The paste will be dragged from the denture base in pressure areas which include: tissue undercuts, exostosis or areas of bone covered with tissue that is not displaceable, such as mid-palatal suture.



Location and relief of pressure areas in denture base:



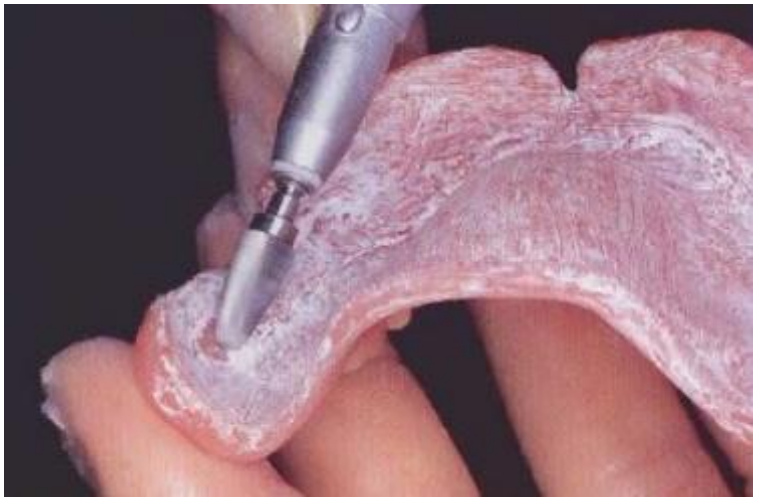
These areas indicate:

1- streaks still present indicate no contact

2 – no streaks present indicate normal contact

3 – no paste indicates impingement (pressure areas)

C)- These areas of impengment should be relieved by grinding with an acrylic bur and then smoothened.

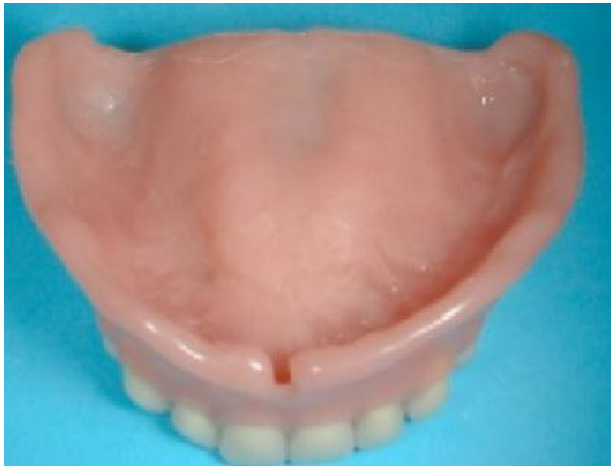


Identification and reduction of overextended borders:

1) The border extensions and contour are compatible with the available spaces in the vestibules.

2) The borders are properly relieved to accommodate the frenum attachments and the reflection of the tissues in the hamular notch area.

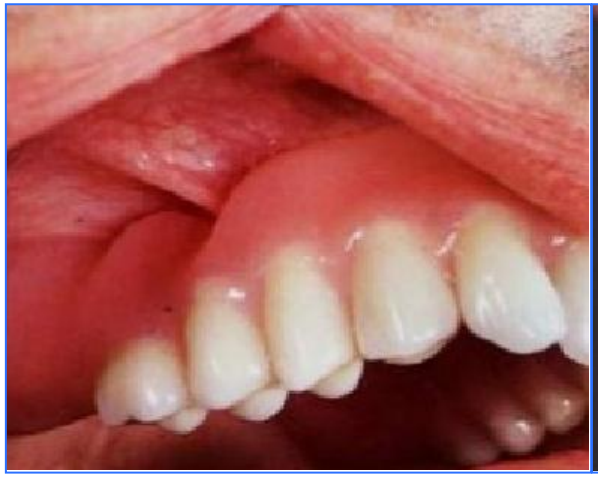
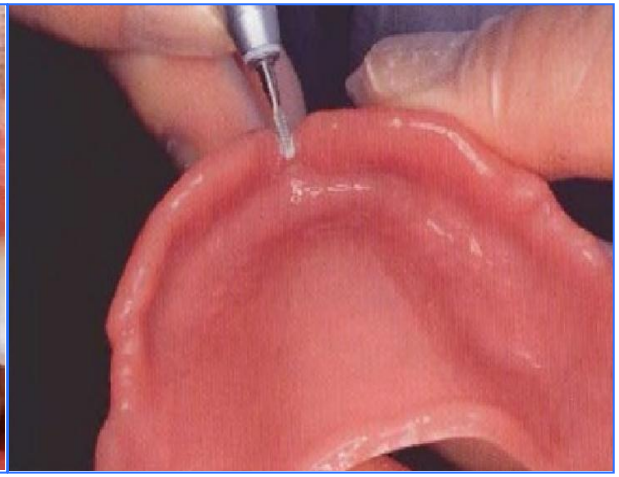
3) The dentures are stable during speech and swallowing.



Identification and reduction of overextended borders:

Procedure:

1) Stretch patient's lips and cheeks
2) Apply disclosing wax to the borders of the denture. Instruct the patient to open the jaws as in yawning, push the lower jaw forward, and move the lower jaw from right to left.
3) Relieve any existing over extensions by grinding; polish the relieved area.

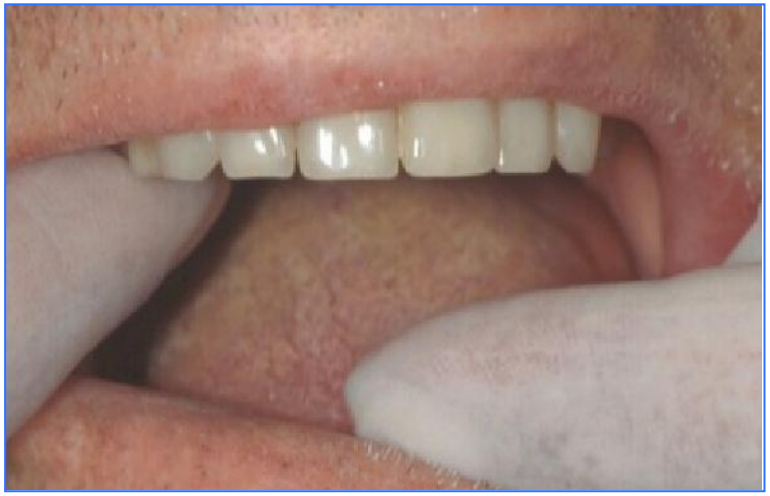




Evaluation of denture support:

Procedure:

Seating the denture in its place and apply finger pressure in a tissue-ward direction alternately on one posterior occlusal section (unilaterally) and then on the other.

When evaluating support, occlusal contact should not be used to apply force, since it would superimpose any occlusal discrepancy that may exist.



Evaluation of stability:

Procedure:

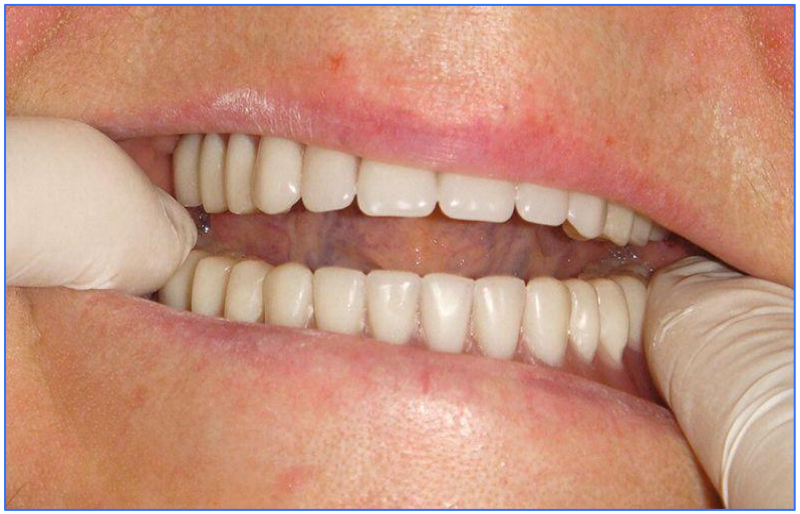
To check the stability of maxillary denture, grasp the denture and attempt to rotate or displace it laterally. The amount of movement must be considered relative to the shape and character of the supporting structures.

To evaluate the stability of lower denture, apply pressure on premolar and molar region on one side of arch, rise of denture on the other side indicates instability.

The causes could be:

(i) Teeth set outside the ridge or lack of denture base on pressure side.

(ii) Under-extended flange on the non-pressure side.

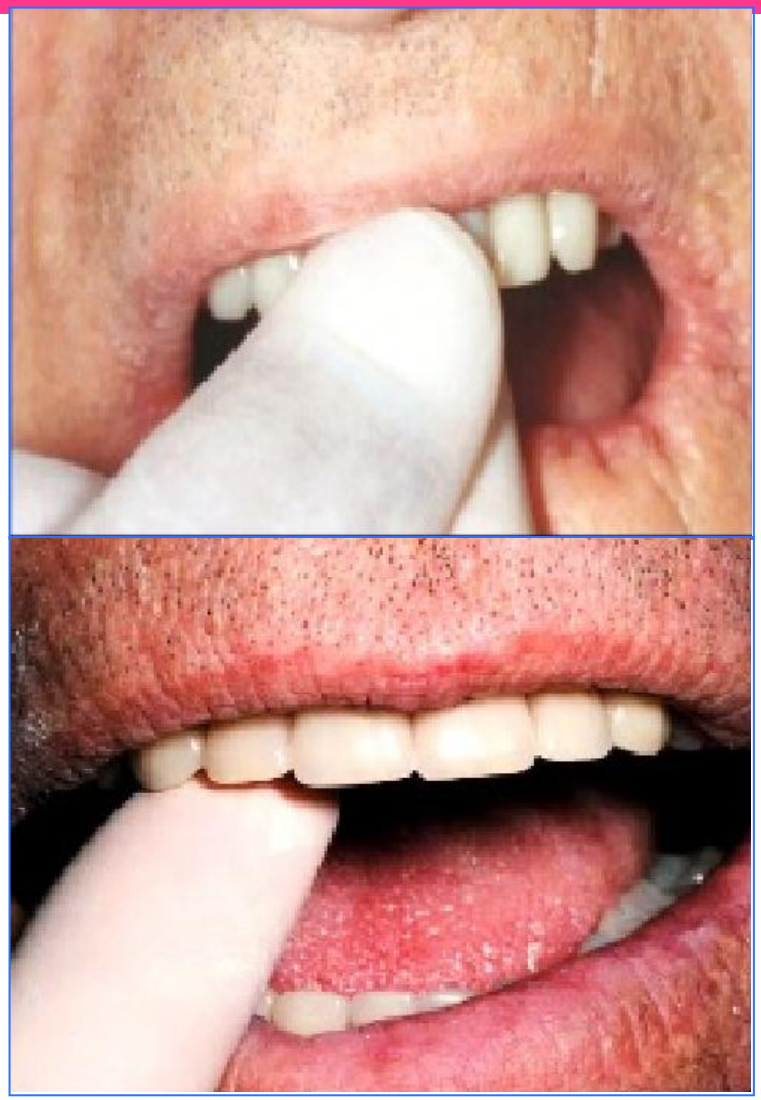


Evaluation of retention:

Maxillary denture retention:

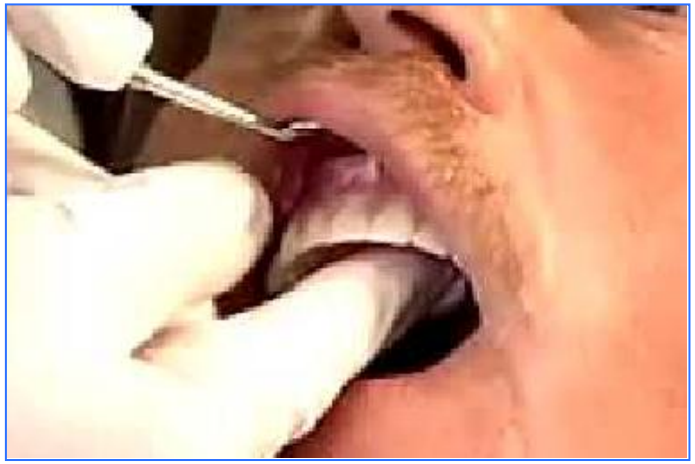
a) Grasp the incisors and pulled downward between thumb and forefinger to inspect the anterior retention, there should be resistance to displacement.

b) Apply upward and outward pressure on the canine at one side to inspect the seal at the tuberosity area on opposite side.



Evaluation of retention:

c) Apply an upward and forward force on the palatal aspect of the anterior teeth to inspect the efficiency of posterior border seal.



d) Apply buccal force on palatal aspect of the posterior teeth on one side to inspect the degree of border seal on the opposite side of mouth.

Evaluation of retention:

Mandibular denture retention:

a) gently push against the facial surfaces of the mandibular incisors backward. The denture should not become dislodged.

b) apply a downward and forward force on the lingual aspect of the anterior teeth to inspect the retention in the posterior portions.

Evaluation of retention:

- Both retention and stability can be evaluated further by placing a trial addition of low-fusing modeling compound on the suspected area of deficiency. An increase in retention or stability or both after this temporary addition confirms the location of the deficiency and indicates that improvement can be made.

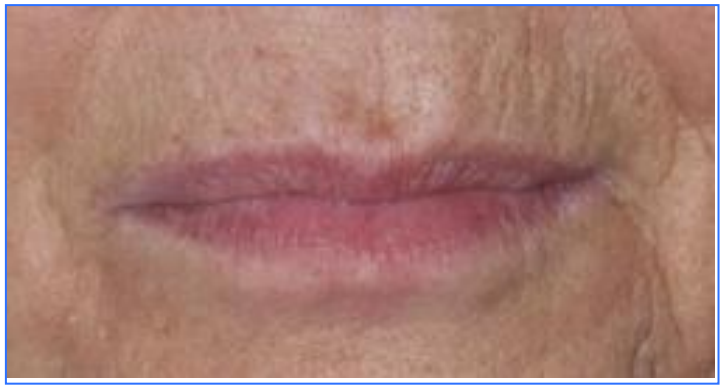
Evaluation of esthetics, facial contours and phonetic:

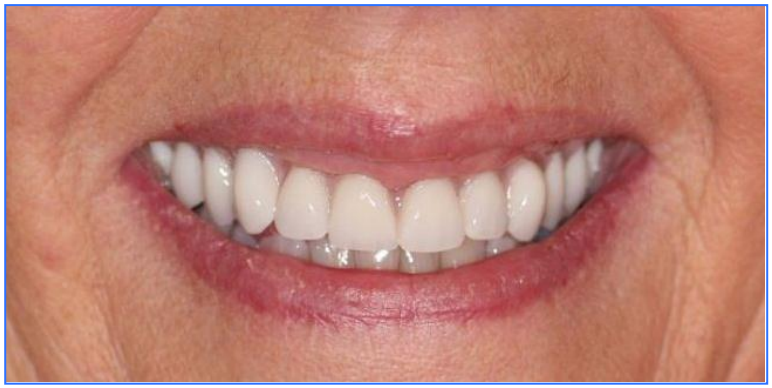
(i) Esthetic requirements are met.

(ii) Predetermined occlusal vertical dimension is maintained.

(iii) Predetermined freeway space is evident.

(iv) Patient has relative phonetic freedom.





Refinement of occlusion:

- It is difficult to see occlusal discrepancies intraorally with complete dentures because of the resiliency and displaceability of the supporting tissues tend to permit the dentures to shift. Therefore, minor interferences may be corrected at this stage to insure:

i. Centric occlusion demonstrates repeatable maximum intercuspation of maxillary and mandibular teeth.

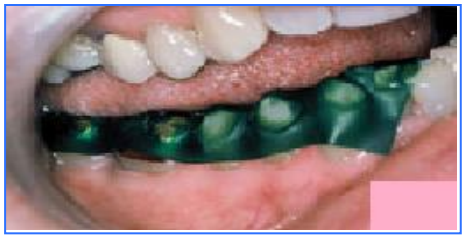
ii. All eccentric relations demonstrate bilateral balance occlusion. (Optional)

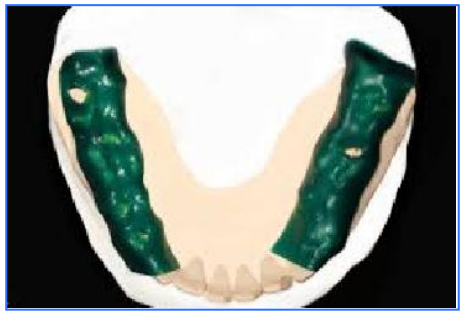
Refinement of occlusion:

- A variety of techniques can be employed for checking the dentures' occlusion.

A) Checking the occlusion with wax:

Occlusal indicator wax is a soft, dark wax with an adhesive surface that is applied to the mandibular posterior occlusal surfaces bilaterally. Areas where the wax penetrated represent premature contacts (heavy occlusal contacts)and should be adjusted, after which the occlusion is checked again. This process continues until all contacts represent similar degrees of penetration into the wax.



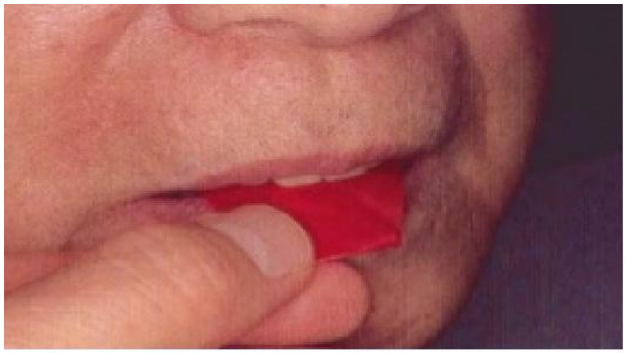


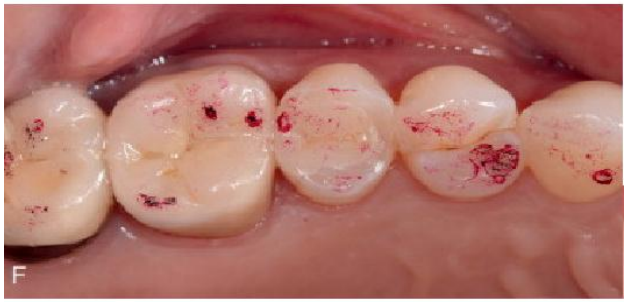
Refinement of occlusion:

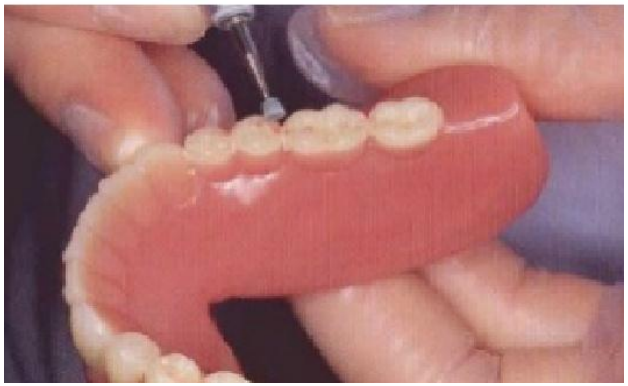
B) Checking the occlusion with articulating paper:

Two pieces of occlusal marking paper or a single “horseshoe” articulating paper is inserted intraorally, placed over the mandibular teeth and the patient is instructed to gently bite together once and release.

The dark contact marks should be recognized as pre-maturities, adjusted and the occlusion checked again. This process continues until the desired pattern is achieved.

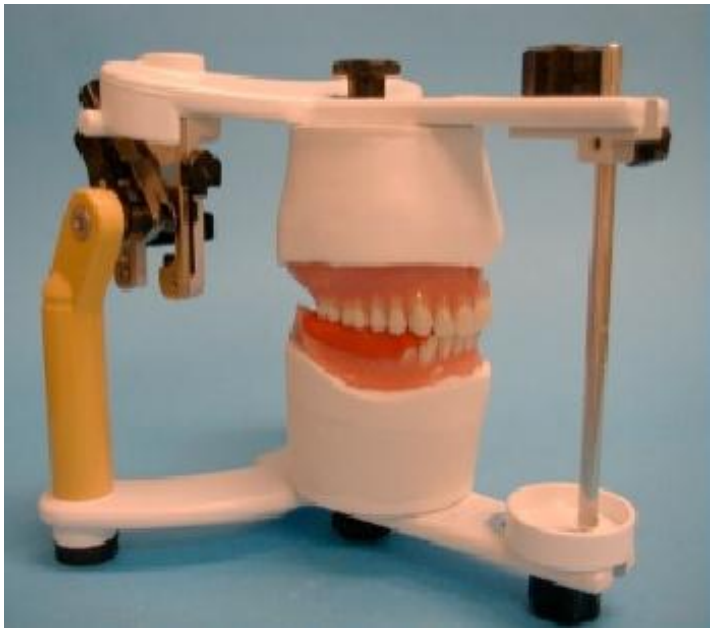






Refinement of occlusion:

C) If contacts still only appear unilaterally or bilaterally but exclusively anteriorly or exclusively posteriorly, a laboratory remount will be required for proper adjustment of both centric and eccentric contacts.



- **CD Patient's Instructions**

- The insertion appointment is the time to educate the patient on how to properly care for the new dentures.
- Whenever possible, the patient should be provided with printed material summarizing the most important spoken instructions.
- More important is the need for the patient to understand the limitations of the denture service and to comprehend the use and care of dentures.

The list of instructions should include:

- Habituation
- Eating habits
- Speech
- Denture's home care.

Habituation:

1) Initially the denture will feel strange and bulky and the facial expression may seem slightly altered and it takes time for the muscles and lips to relax and assume their natural position around the dentures.
2) Patient's mouth and tongue have to get adjusted to the denture.
3) Soon after the insertion of dentures, salivary flow is stimulated which declines after 2-3days unless something is physically wrong with the dentures which can cause irritation.

Eating habits

- Learning to eat with dentures takes time and requires positive effort from the patient side.

1) Eat slowly and cut food into small pieces.
2) not to chew hard in the first few days and avoid sticky food.
3) chew on both sides over the back teeth.
4) Try to chew vertically (up and down) rather than horizontally (side to side).
5) not to drink water by lifting the tumbler but drinking by sipping.

Speech

1) Speaking with the dentures normally requires some practice and patience.
2) read aloud in front of a mirror and repeat the words those which are difficult to pronounce.
3) With passage of time patient's speech with denture will be better than without denture.

Denture's home care

The patient should be instructed to do the following:

1) How to insert denture? It does not matter which prosthesis, upper or lower, should be inserted first unless there is virtually no retention to the maxillary denture. In this case the mandibular denture should be inserted first.

2) How to remove denture? break the seal by running one or both fingers along the full length of the flanges or by puffing out the cheeks.

3) Thoroughly rinse the mouth and denture after every meal and after soaking.

4) clean the denture "outside of the mouth" daily by soaking and brushing with an effective, nonabrasive denture cleanser and soft brush, and keep cloth in the wash basin so, if denture will fall then it won't break.

5) Avoid using of any abrasive or detergents or hot water (above 70° C), in cleaning the denture because this will craze the denture surface resulting in a bleached appearance.

6) never wear denture at night and should store denture in cold water.

7) It is recommended that dentures should not be worn continuously (24 hours per day) in an effort to reduce or minimize denture stomatitis.

8) store denture in water at night to avoid warping.

9) massage the gums for few minutes with fingers after removing the denture.

10) Dentures should be cleaned annually by a dentist or dental professional using ultrasonic cleansers to minimize biofilm accumulation over time.

11) Patients who wear dentures should be checked annually by the dentist for maintenance of optimum denture fit and function, for evaluation for oral lesions and bone loss and for assessment of oral health status.


THANK YOU