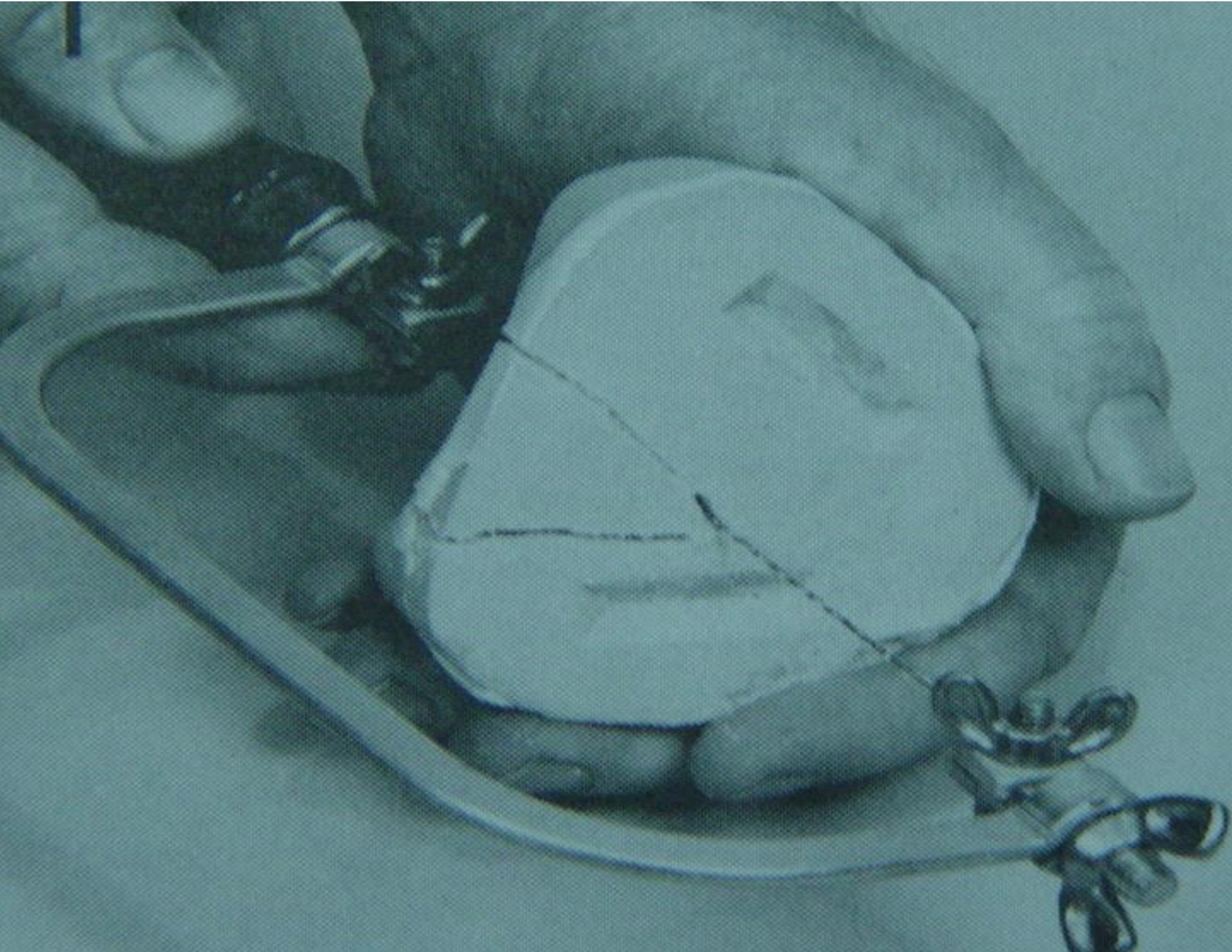
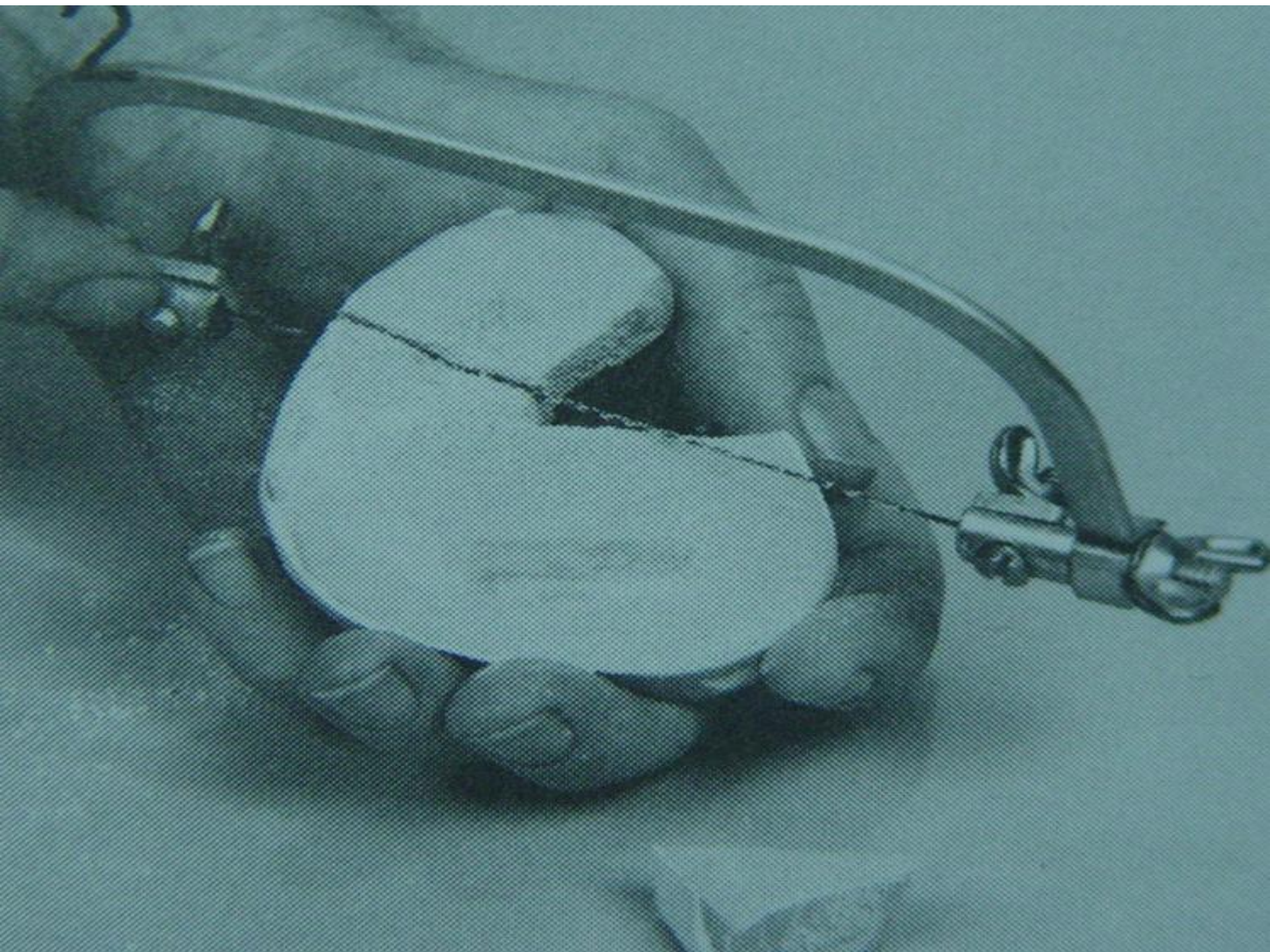


Finishing and Polishing















Finishing using tungsten carbide burs with different shapes



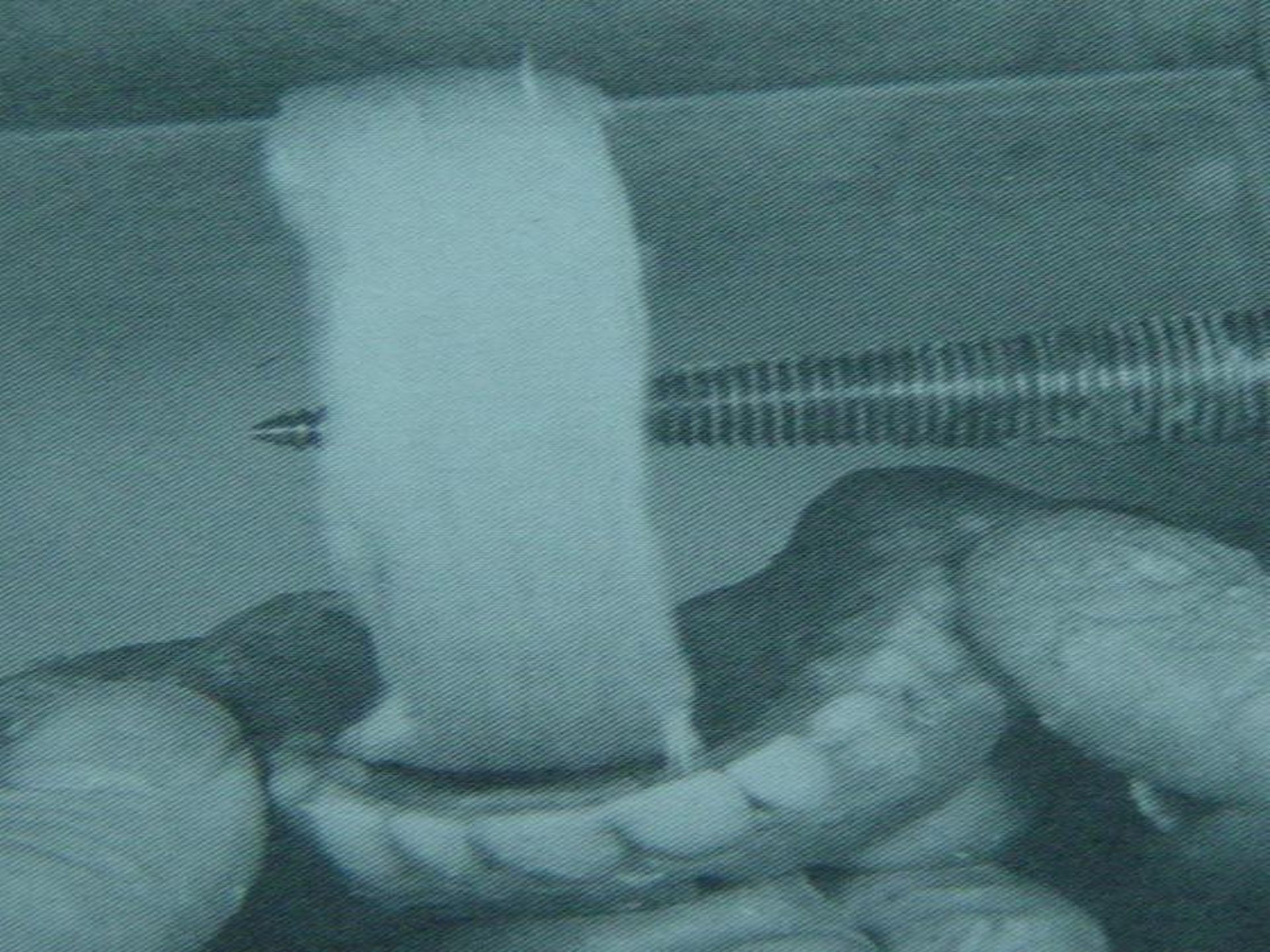






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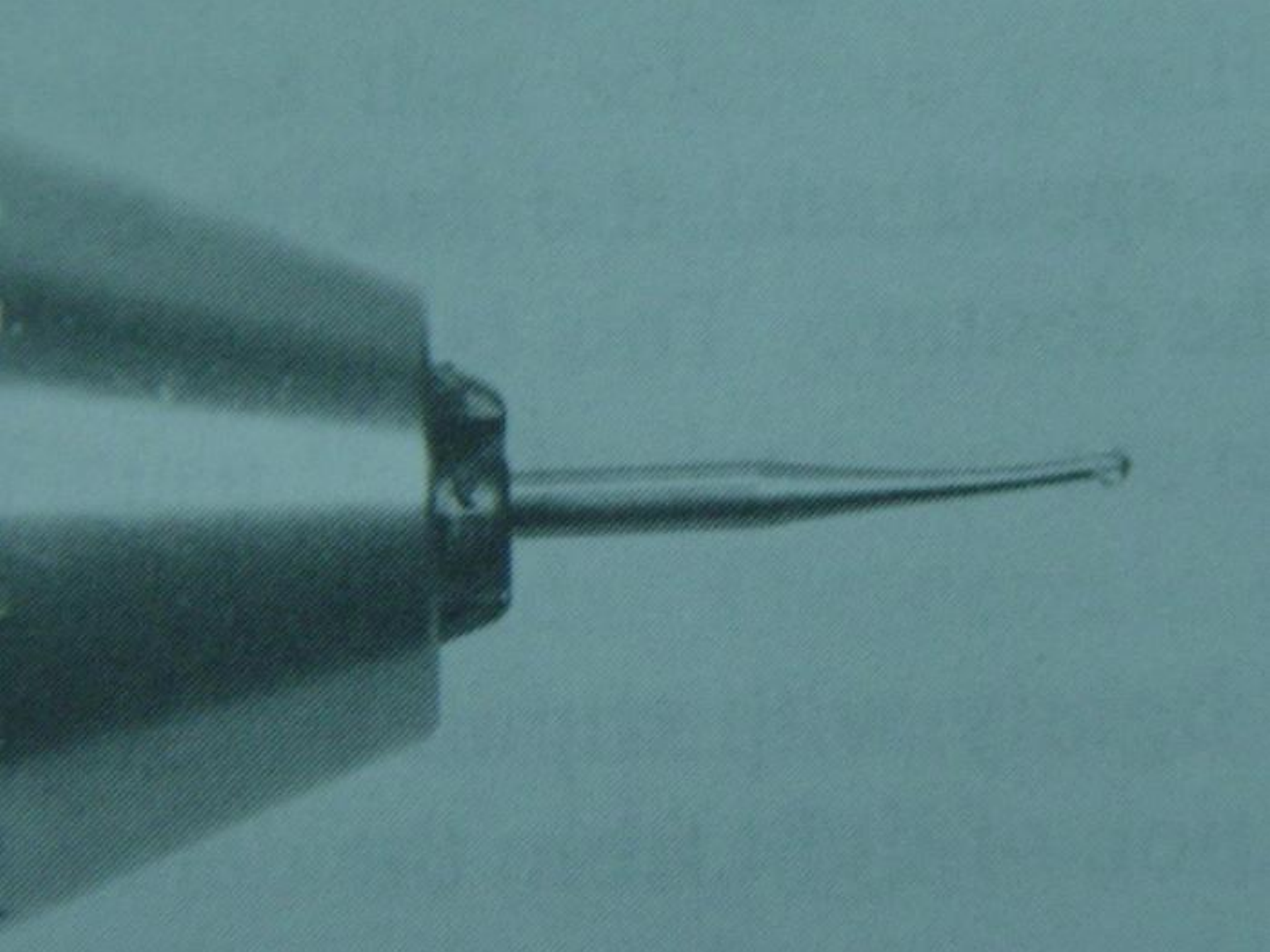








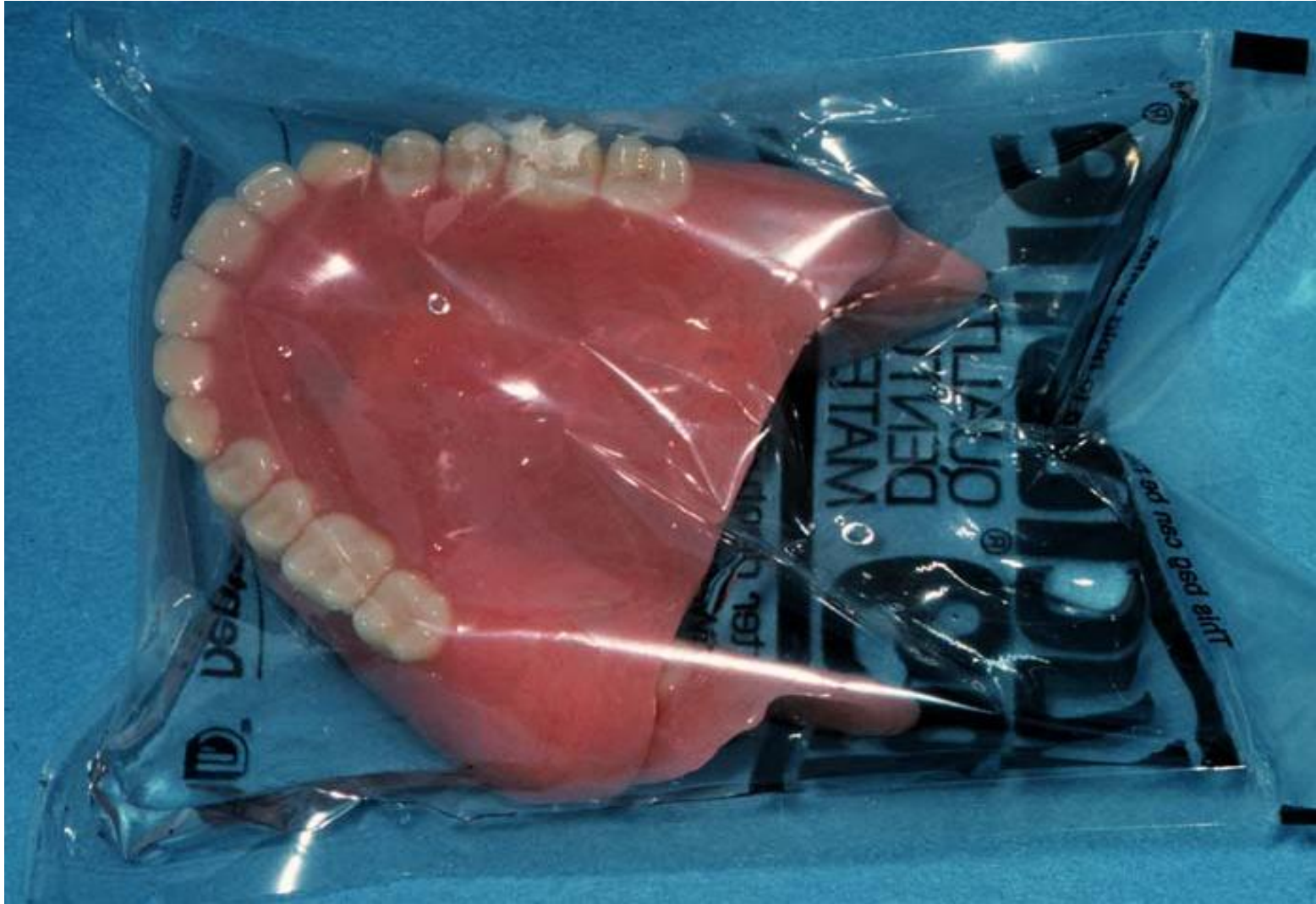








Delivering and Adjusting Complete Dentures



Denture Evaluation:

- 1- Dentist's evaluation**
- 2- Patient's evaluation**
- 3- Friends' evaluation**

Before denture insertion the patient should keep his old denture out of his mouth for 12-24 hours.

Sources of errors in CD:

- 1- Errors made by the dentist.**
- 2- Errors made at the laboratory.**
- 3- Inherent deficiencies in the materials.**
- 4- Biological factors.**

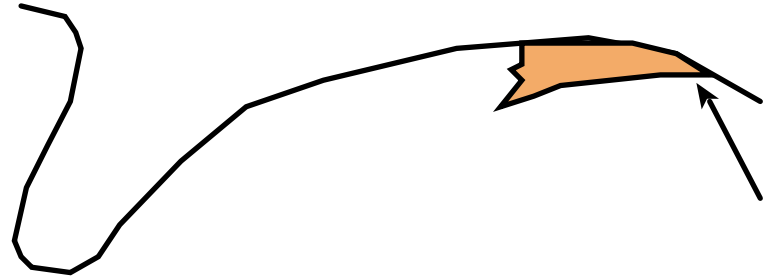
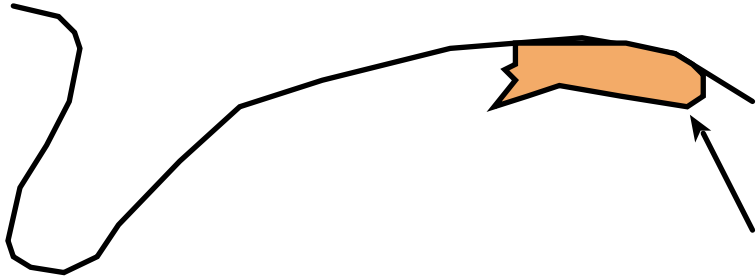
Prior to the Appointment

Extraoral examination

- Inspect for specules with gauze**
- Smooth any sharp areas**
- Blend angular changes on periphery with the art portion of denture**



Inspect posterior border: (2-3 mm thick) and gradually tapers to the soft palate



Order of Adjustments

Check and Adjust:

- 1- Base Fit with PIP
- 2- Peripheries with PIP (one side at a time)
- 3- Occlusion with Articulating Paper + Clinical Remount
- 4- Esthetics, phonetics, patient concerns

Insert Maxillary Denture First

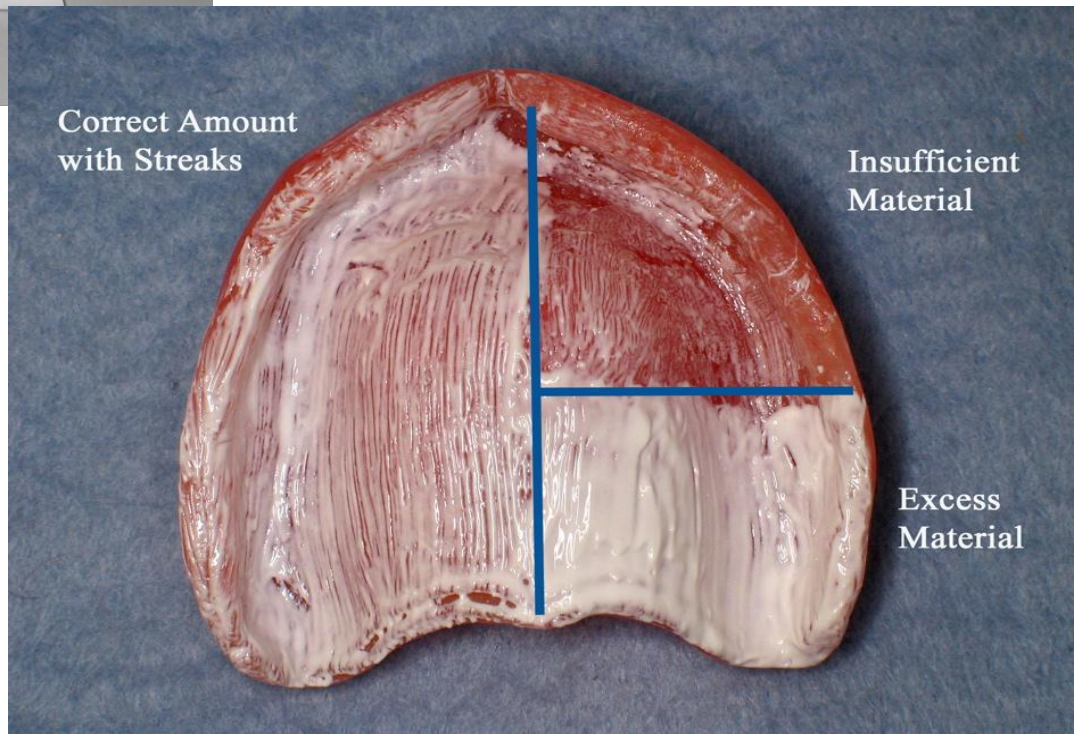
Ask about comfort

Identify potential areas for adjustment

Resistance to seating

Check Adaptation of the Denture Base:

Remove a small amount of pressure indicating paste (PIP), place it on a mixing pad and reseal the jar to avoid contamination. Dry the denture, place a thin coat on the tissue surface with a stiff brush and leave streaks in paste. **Denture should be more the colour of the indicating medium than the denture**



Prior to placement, ensure damp mucosa spray surface of PIP with air/water syringe. Seat denture firmly, don't contact lips/ridge when inserting. Remove from oral cavity by breaking seal with finger pushing up into height of vestibule



Reading PIP

Burnthrough (No paste left): Excessive pressure that should be relieved

Streaks remaining: No tissue contact and other areas need to be relieved

Paste remaining with no streaks: Acceptable contact

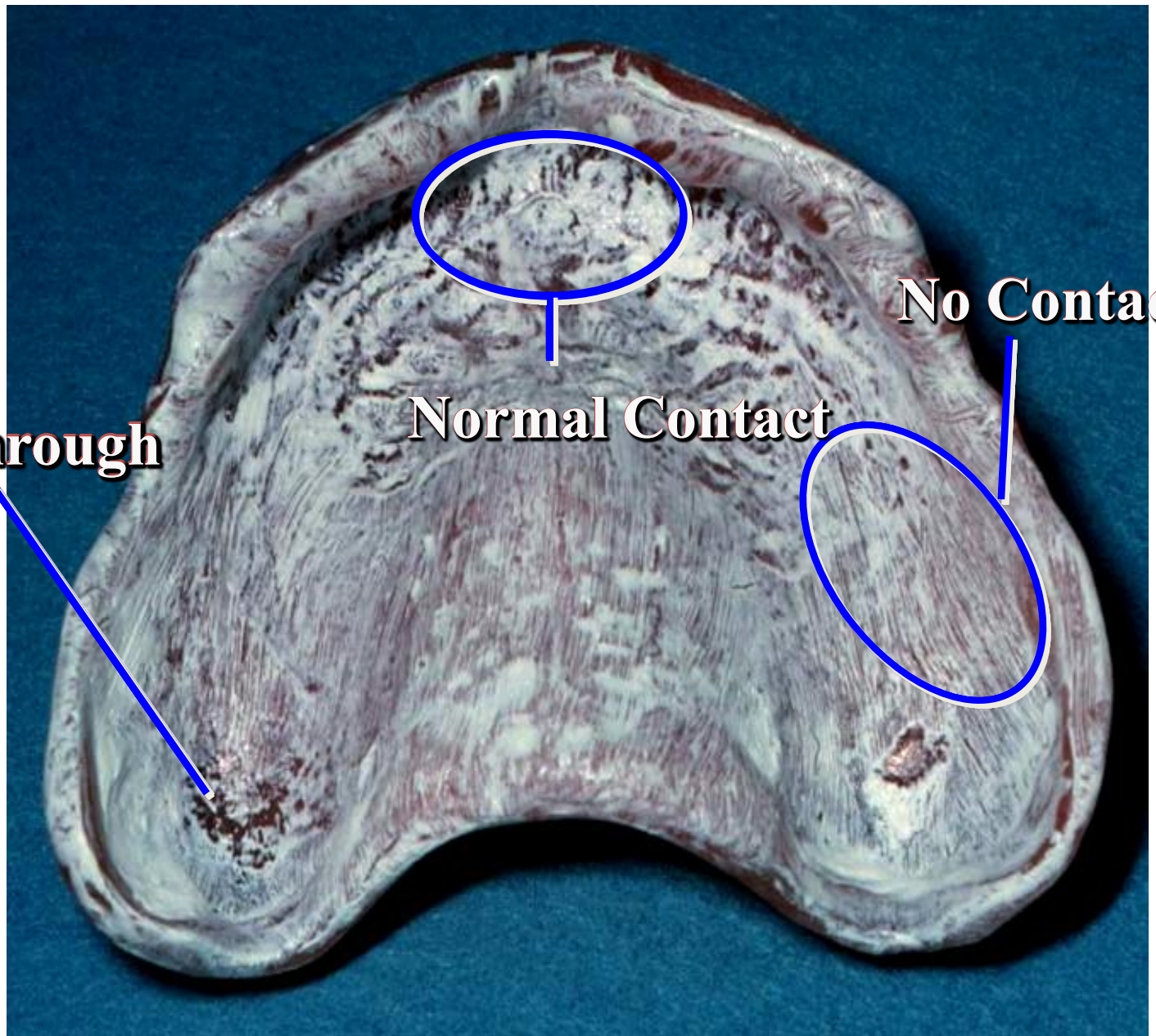
Relieve pressure spots - large acrylic burs

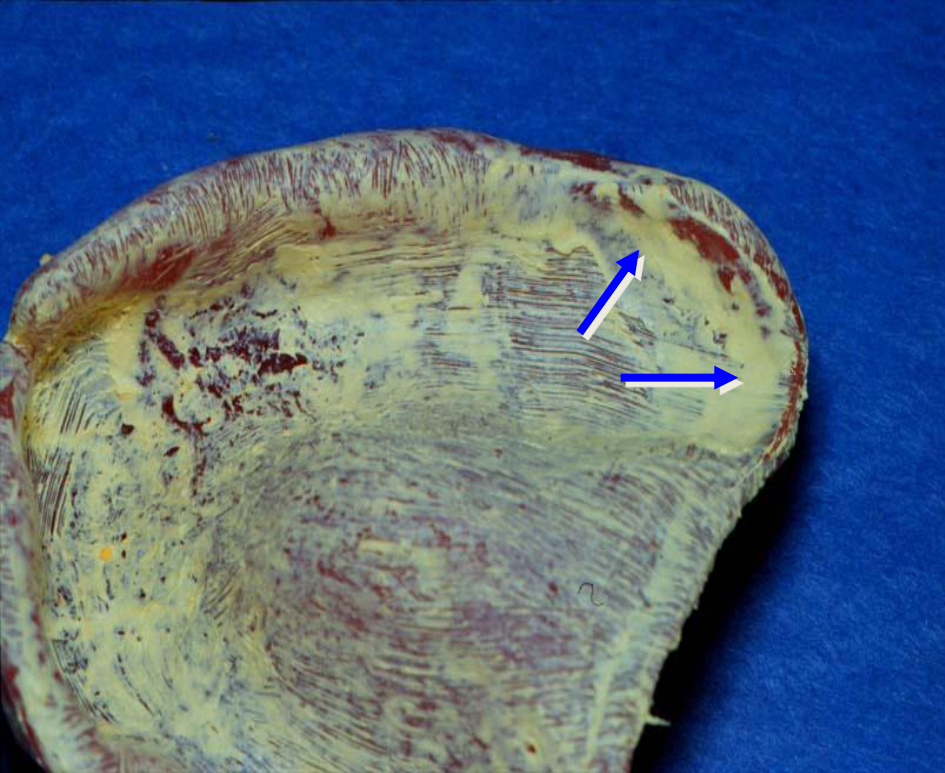
Take care with undercuts, look like burnthrough but may not require adjustment

Burn through

Normal Contact

No Contact





**Use care in retentive
areas like hamular
notch and tuberosity
undercuts**

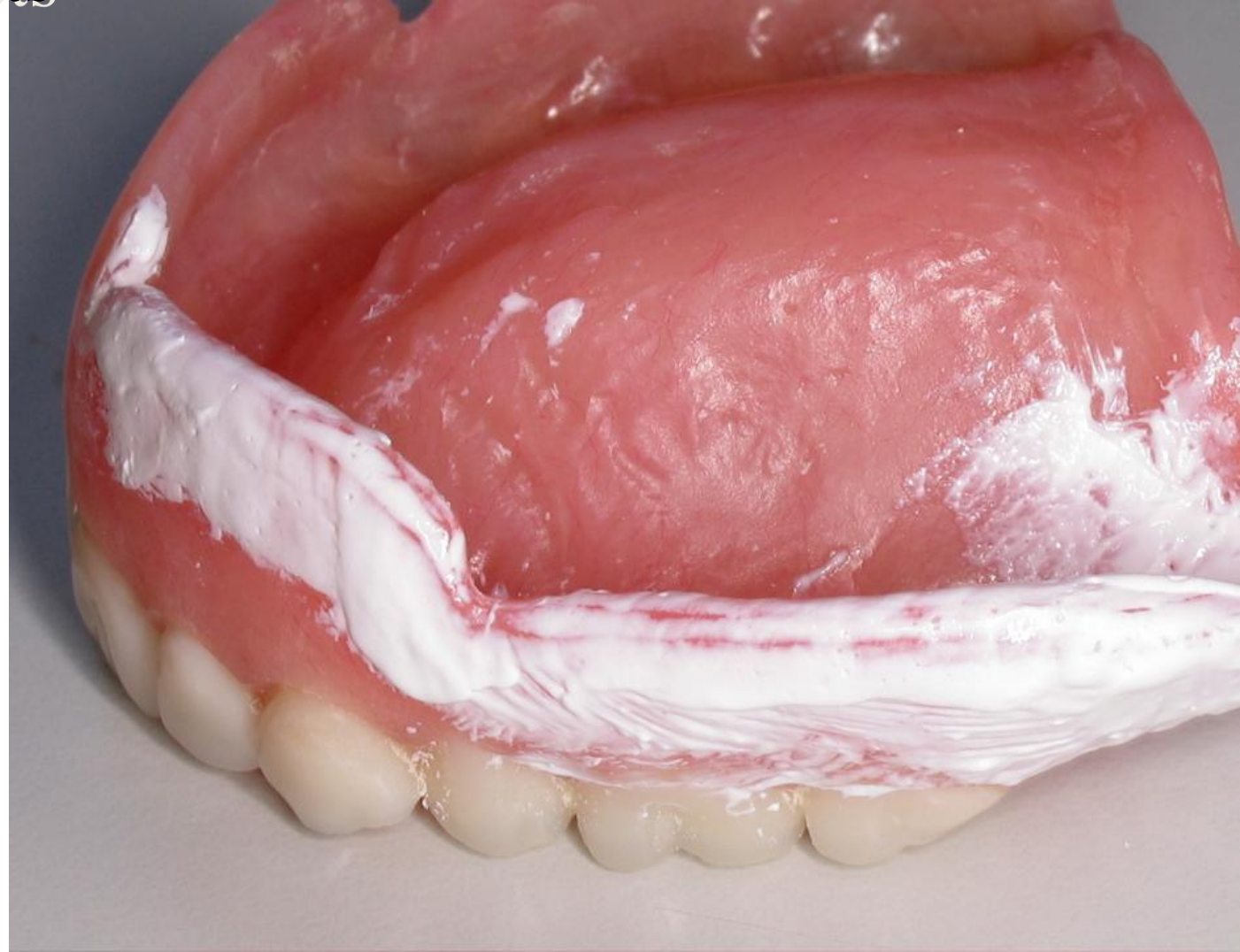
Repeat until denture fully seats with relatively uniform contact, minimal streaks and no gross burnthrough

Check for Peripheral Overextensions: Seat denture & border mold. Flanges should fill vestibule but not be dislodged by manipulation. If denture dislodges, use PIP to adjust.

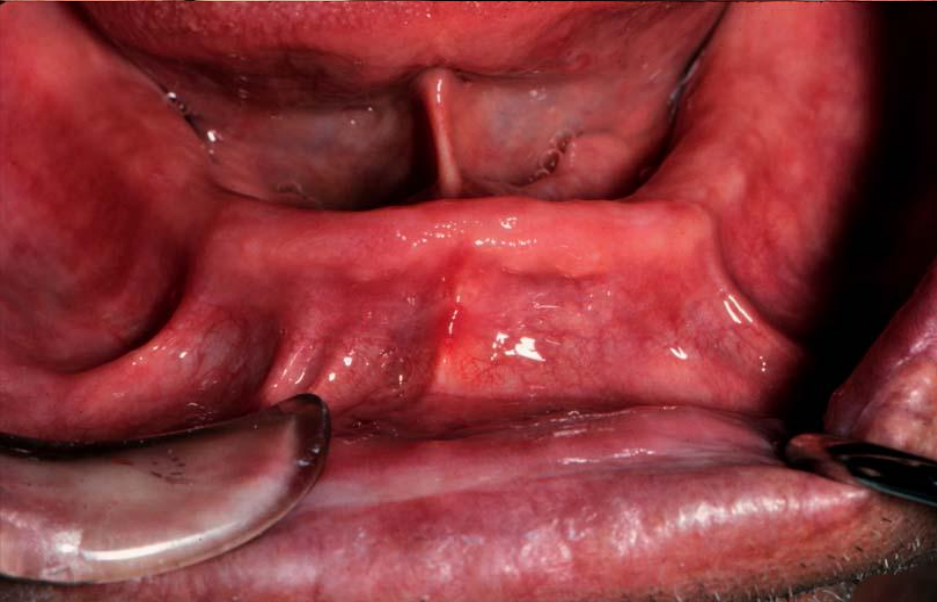


Peripheries

Border mould, adjust, check again and adjust high spots or facets



Special Attention to Frenal Areas



Use PIP to Check Contours

Root prominences



Thick peripheries



Alter Phonetics



Remove paste with gauze, cotton rolls, brushes, or alcohol for stubborn areas. Rinse and replace denture

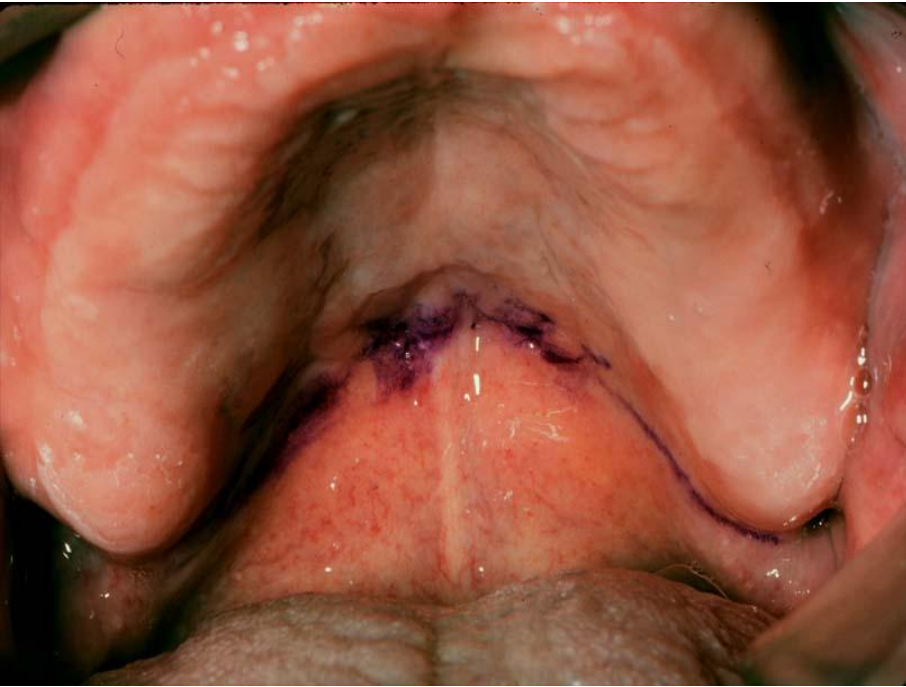
Check for Retention

Pull outward & upward on lingual of canines



- **Non-retentive denture:**
 - **No palatal contact**
 - **Flange in 1st quadrant is short**

Adjust posterior overextensions using an indelible marker



**Repeat for the Mandibular
Denture**

Occlusal Analysis

Insert both dentures. Place a cotton roll between posterior teeth bilaterally. Patient bites forcefully for one minute simulating compression of tissues after the patient has worn the denture for a period of time.

Place patient in centric relation, visually check the occlusion, stabilize mandibular denture and check with articulating paper



Anterior Open Bites or Unstable Posterior Contacts

Posterior denture base contacts, occlusal prematurities
Use articulating paper to mark and to eliminate gross
interferences prior to remount

Clinical Remount

Remount on an articulator, allows extraoral occlusal adjustment and eliminates continual removal & replacement of dentures. Selective grinding is better to be done on the articulator:

- 1- Shifting of the denture bases.
- 2- Tissue distortion.
- 3- Eccentric closures by the patient.
- 4- Presence of saliva.
- 5- Lack of visibility.
- 6- Time consuming.
- 7- Psychological factor.

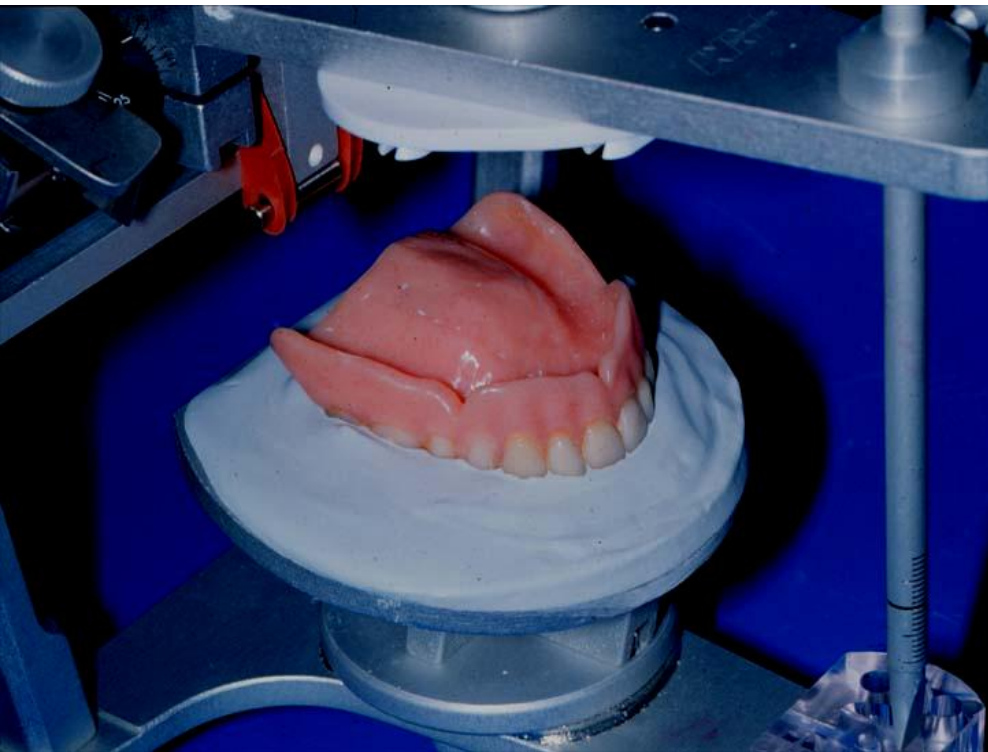
Not all dentures require an occlusal remount.

Master cast is destroyed during removal of the processed denture, so new remount casts without undercuts



Remounting Maxillary Dentures

Place remount jig on articulator, seat remount index on jig, seat maxillary denture in index, place remount cast into denture and mount with plaster



Record Centric Relation

Small amount of bite registration material

Just cuspal indentations

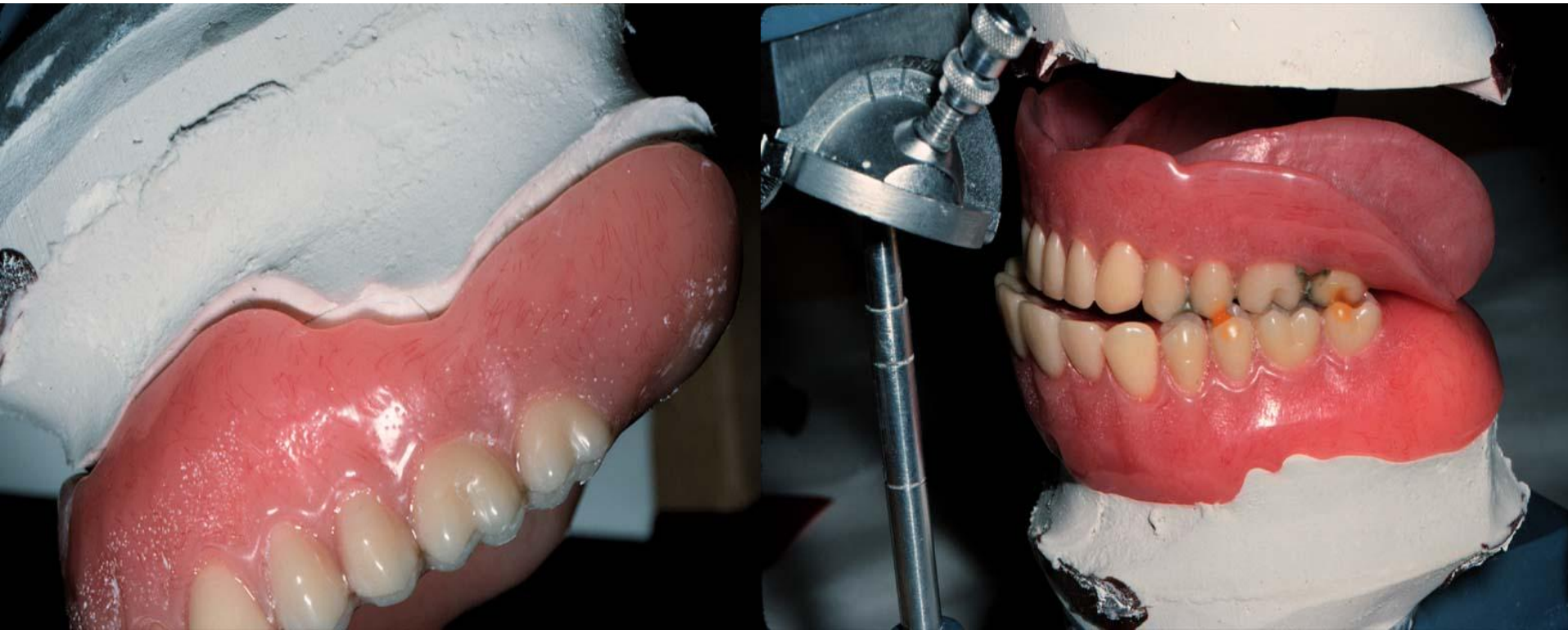
Ensure no penetration of material, allow to fully set and ensure the record is precise & repeatable

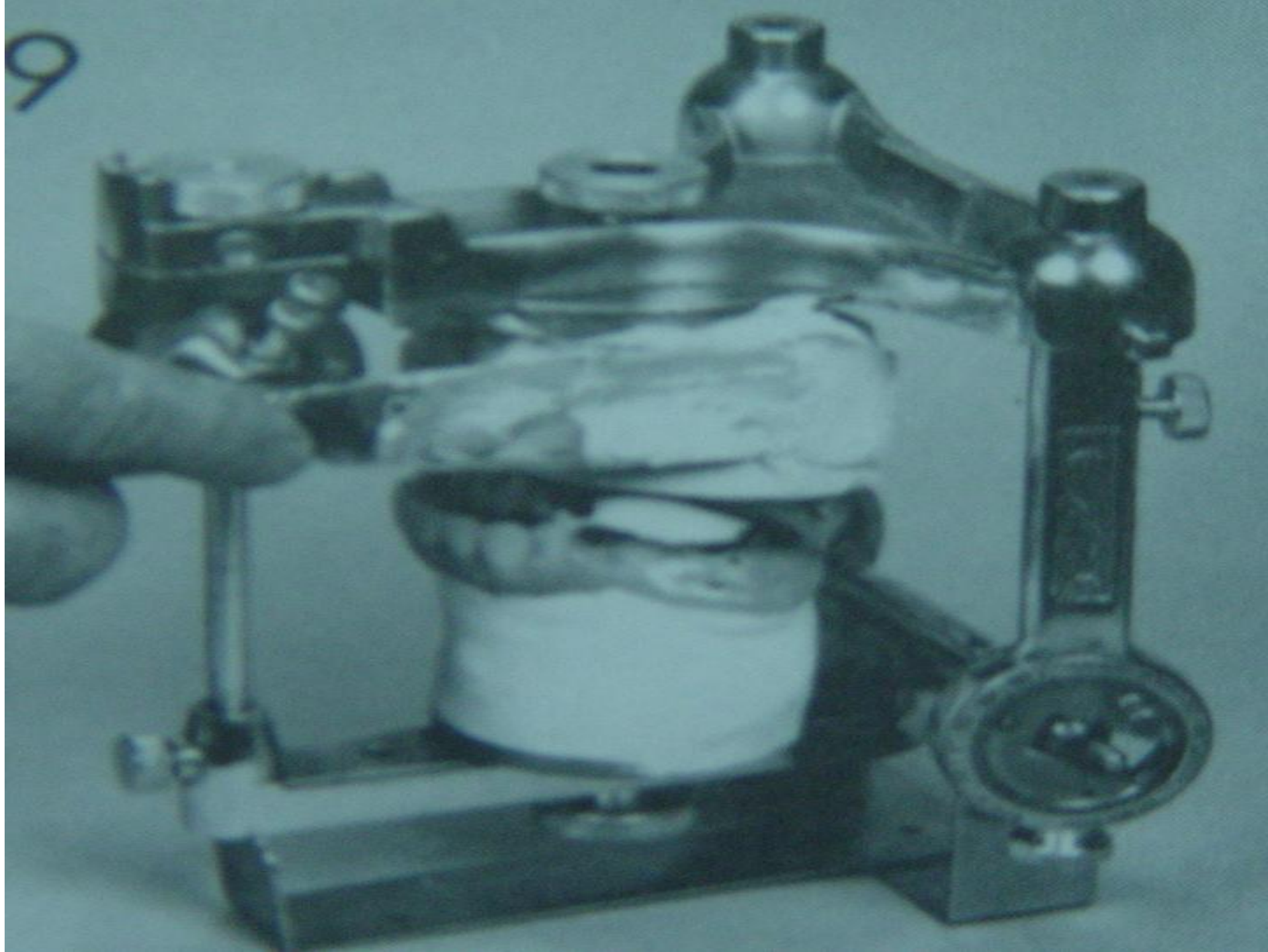


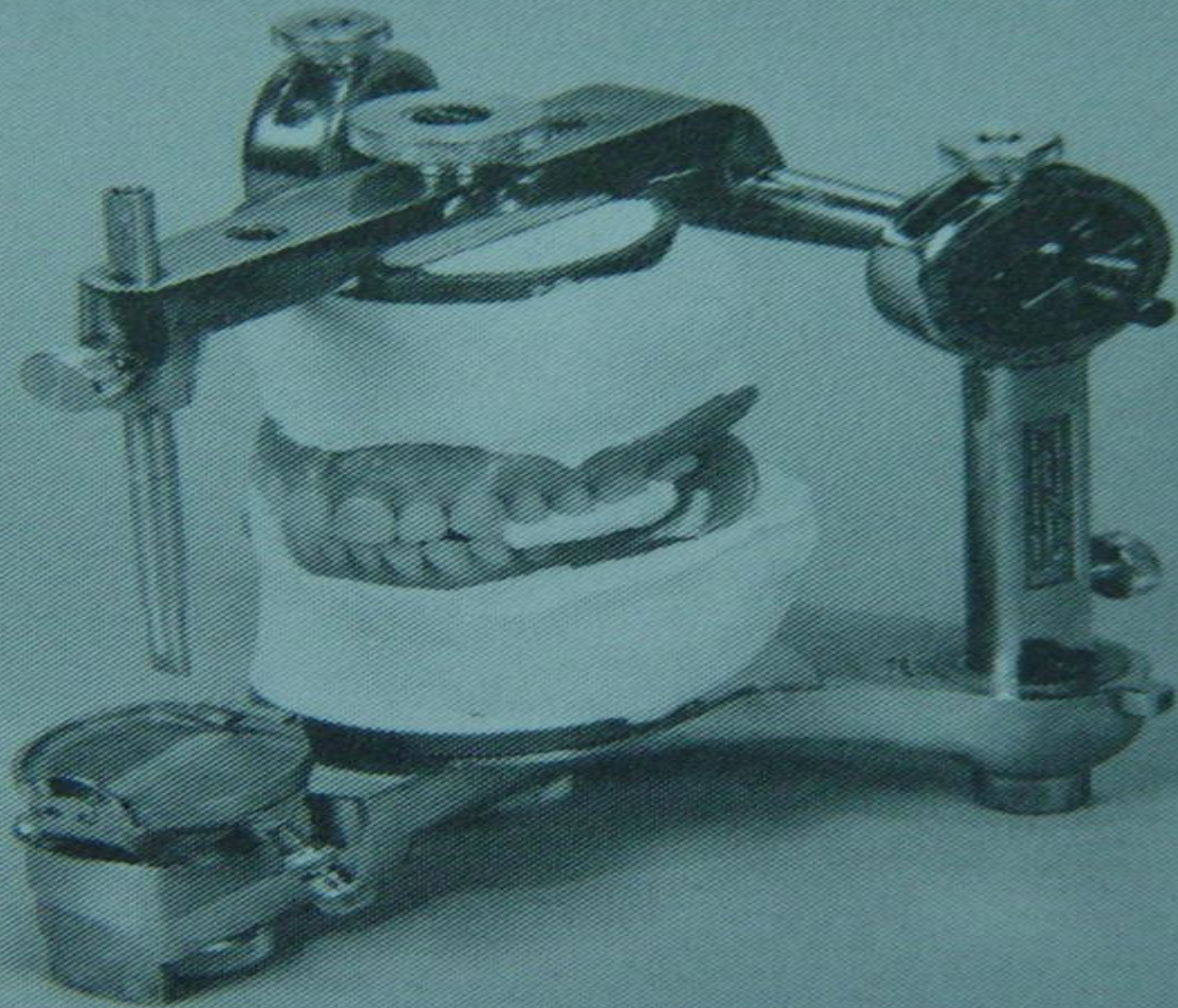


Mount Mandibular Cast

Maxillary denture on remounted cast, interdigitate dentures and stabilize with sticky wax. Place cast in mandibular denture, invert articulator and attach mandibular model







- Ensure no debris under dentures
- Verify centric position after mounting

Verify the protrusive record:

Strip of Alluwax over all posterior teeth, patient occludes 4-6 mm in protrusion, chill the wax and set the condylar inclination similar to that taken previously

Selective grinding:

Use articulating paper of minimal thickness (80 microns....8 microns)

You may start with a thicker one and then finish with a thinner one.

Ensure: No anterior contacts in CO

Uniform simultaneous, bilateral centric contacts

Smooth excursive movements

Balanced Occlusion

Ensure:

Balancing contacts are present

Balancing contacts not heavier than working contacts

Light grazing contacts of the anterior teeth in excursions

Intraorally verify that contacts are similar and the occlusion feels comfortable to the patient

Check vertical dimension: 2-4 mm of interocclusal distance at physiologic rest position

Phonetics:

‘F’ sounds: maxillary incisors touch lower lip

‘S’ sounds: incisors close together

posterior teeth do not contact

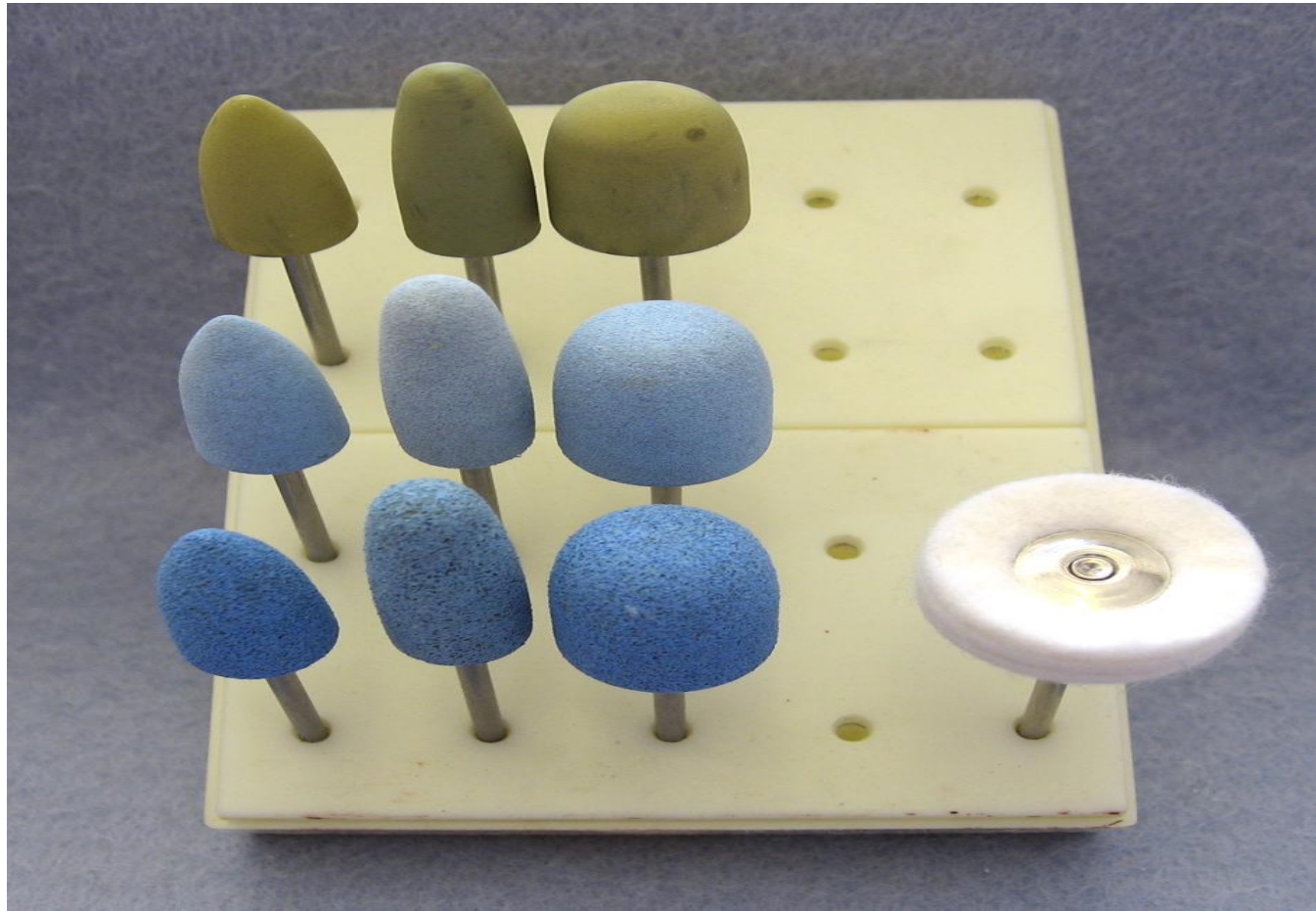
Check Esthetics



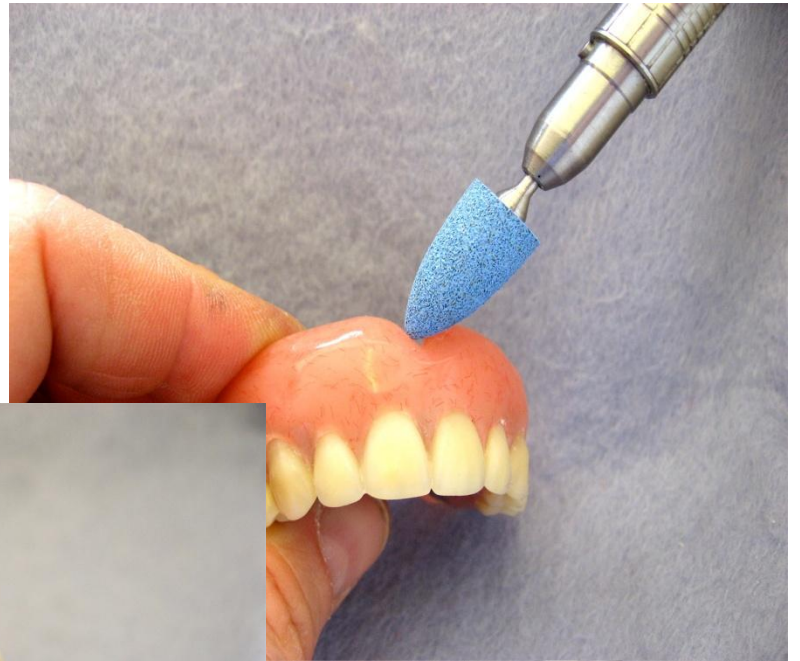
Polish Adjusted Areas

Initial polish/minor adjustments:

Brasseler Acrylic Polishing Kit



Different Shapes



Final Polish:

Dazzle Paste mixed with water & liquid soap

Dampened felt cloth wheel (disposable)

On lathe in lab



Provide Care Instructions

Mastication and speaking
with the new dentures

QuickTime™ and a
TIFF (Uncompressed) decompressor
are needed to see this picture.

Oral and denture hygiene
instructions

Summary

Denture base should be:

- Retentive, does not displace with moderate vertical pressure
- Proper flange extension
- Indicating medium reveals no areas of significant impingement
- No spicules and well polished
- Proper flange thickness (generally not $> 4-5$ mm, rolled not sharp)
- Proper relief of frenula
- Bases terminate at proper anatomical landmarks
- Patient comfortable

Occlusion:

- Posterior teeth contact bilaterally & simultaneously, w/o shift
- Degree of balance evident in centric and eccentric positions
- Acceptable interocclusal space
- Anterior teeth are not in contact in centric occlusion

Grazing contact in protrusion

Acceptable esthetics

Acceptable phonetics

Continuing Care

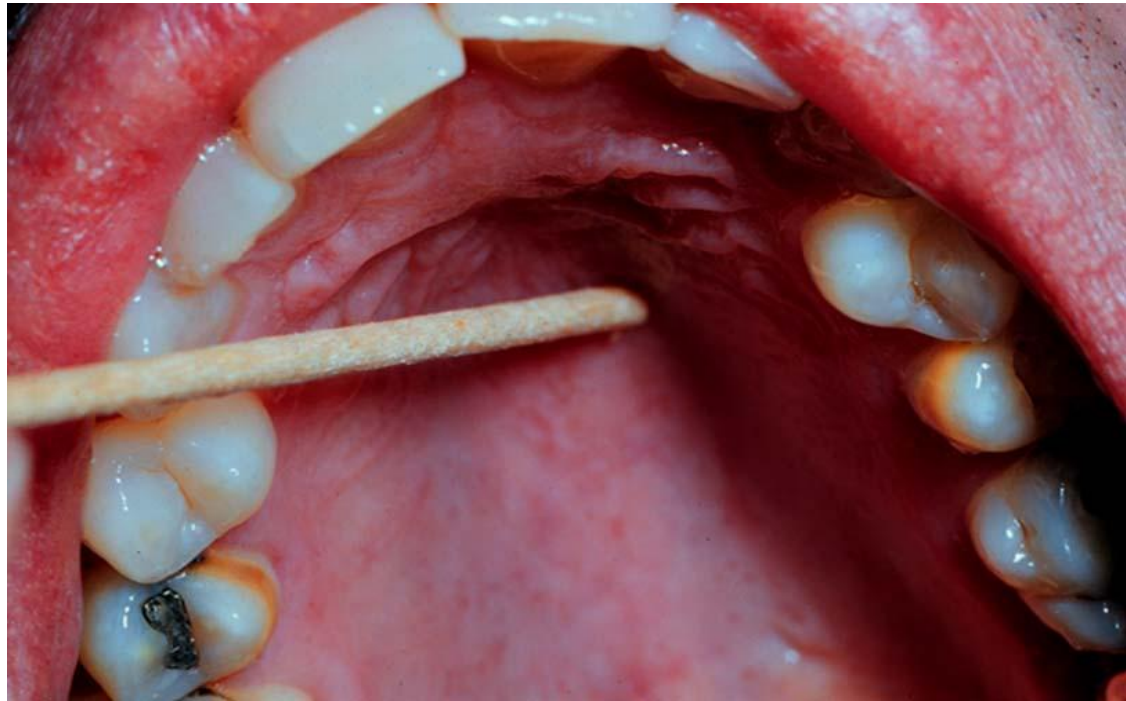
Differential Diagnosis of Post-Insertion Problems

Principles of Diagnosing Denture Problems

Never adjust unless you can see exactly where to adjust
Use indicator medium
(PIP, indelible marker, articulating paper, etc.)

Patients frequently wrong in exactly locating source of problem, so spend time, look and think.

- Where? Dentist needs to locate (PIP, tip of instrument, indelible stick)
- When? (Chewing only?)
- How long?
- Anything makes it better or worse?
- Have patient demonstrate problem-



Limited number of problems:

- Denture base
- Occlusion
 - Interferences - esp. protrusive
- Retention
- Vertical dimension
- Allergies and infections
- Tooth position

Denture Base

Impingements, specules, sharp edges

Diagnosis - PIP (never adjust unless burnthrough)

Sore all time

If worsens throughout day may be occlusion, not denture base

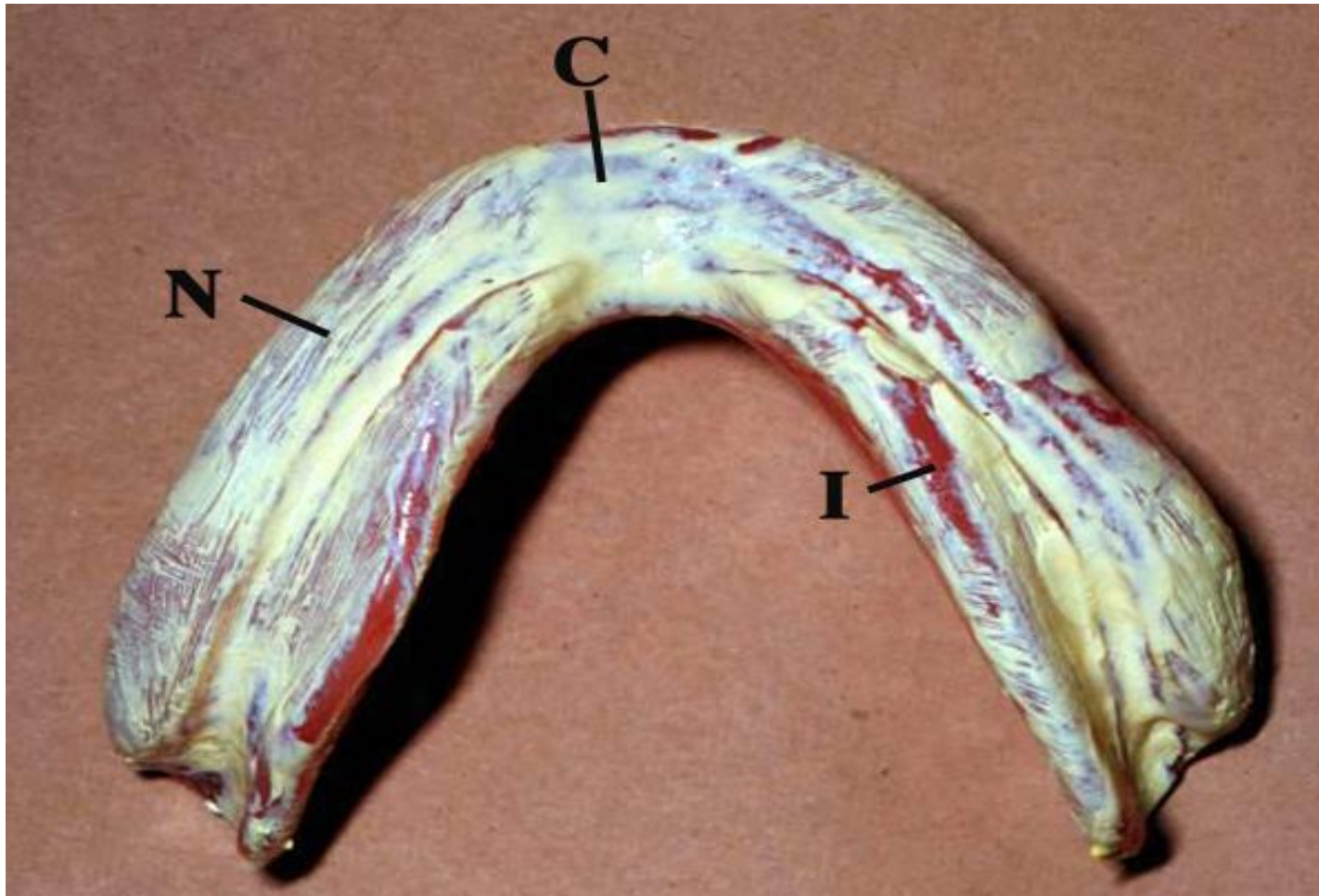
May still be occlusal, if inflammation causes swelling

Place paste with streaks

Streaks - no contact (N)

No Paste - Impingement (I)

Paste, no streaks - normal contact (C)



Occlusion

One of most common problems

Pain gets worse through day

Difficult to determine, intraorally - reflex avoidance of pain

Interferences - especially in protrusive

Fingers on canines - should feel smooth

Sore when bite

Fit changes or comfort deteriorates
through day---Remount



Retention Problems

Short flanges: PIP - still streaky

Fingers on canines outwards (post palatal seal)



Short flanges: Look for space

May be retentive for a while if a lip seal established, until movements disturbs the lip seal

Post-palatal seal

If the denture is short of the vibrating line, the denture may bind on hard palate, (check with PIP)

Post-palatal seal

Inadequate tissue contact

Food gets underneath

Bubbles as denture is placed (check with PIP)

If over-extended to moveable soft palate, denture loosens during speech, chewing

Occlusal Vertical Dimension (OVD)

Excessive: Continual and generalized pain and fatigue
or muscle soreness

Insufficient: No power

Allergies and Infections

Rare allergies: General inflammation

Hygiene: Generalized inflammation

Tooth Position

Instability (teeth not over ridge)

Difficulty chewing (occlusal table not long enough)

Cheek and lip biting (insufficient overjet)

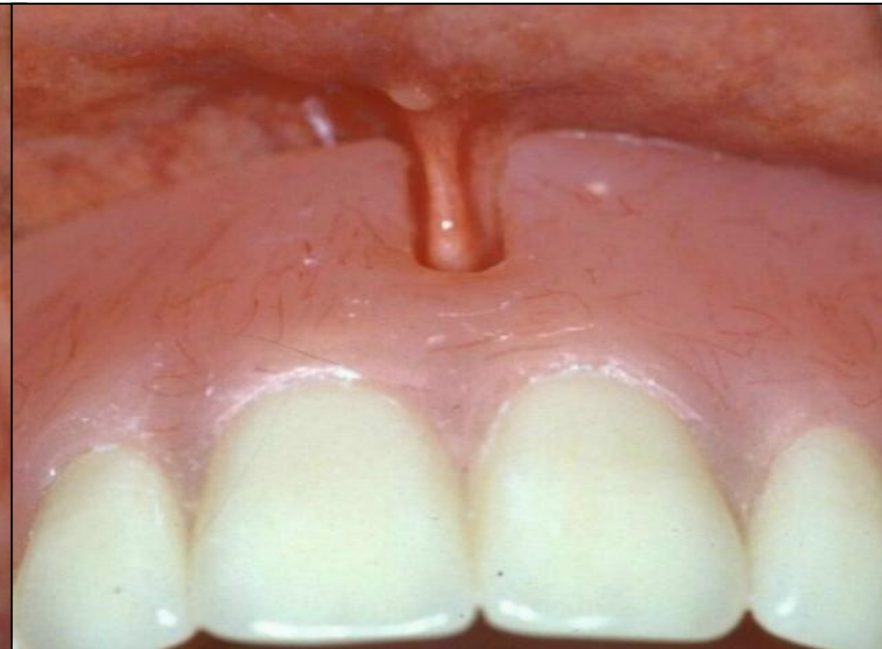
Esthetic, phonetic problems

May have to change position of teeth

Most Common Areas Requiring Adjustments

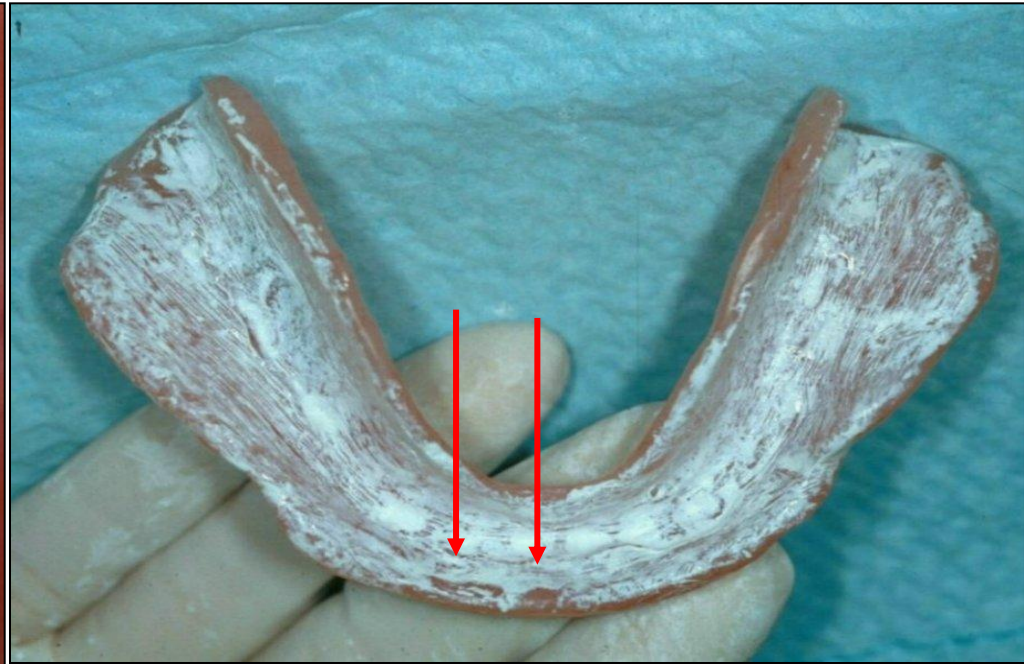
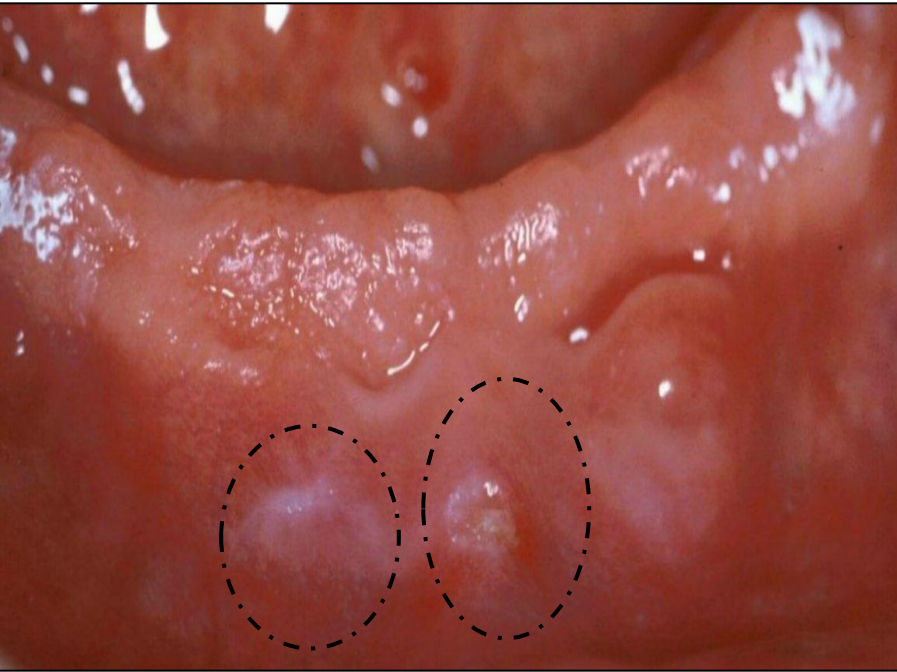
Maxillary

- Hamular notches - ulceration can occur if over-extended
- Labial frenum - requires adequate relief (often feels bulky)
- Mid-line fulcrum on the bony raphe
- Zygomatic impingement



Mandibular

Lingual frenum - impingement can cause displacement of the denture or ulceration



Retromylohyoid overextensions: Sore throat, denture moves when swallowing

Buccal shelf overextension

Phonetic problems

Wait and allow time for adaptation

Add soft wax to palate and check

If anterior poorly positioned, then remove and replace

THANK YOU