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Clinical Removable prosthodontics 2

Fitting the Framework

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WHY TRY IN of the framework?

- No matter how much care is taken during the clinical and laboratory phases of removable partial denture service ; some discrepancies in the fit of the framework will occur.



WHY TRY IN of the framework?

- . Improvements in the materials and techniques have reduced the number and the size of these discrepancies, but have not eliminated them



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WHY TRY IN

- *It has been estimated that as many as 75% o removable partial dentures do not fit the mouth on the day of insertion.*



WHY TRY IN?

- Improper fit may :
contribute to movement of the associated teeth.
-and result in discomfort.



Stewart's



- Each completed removable partial denture must be completely passive in the mouth.
- When the prosthesis is fully seated, it should not exert forces on the teeth & the soft tissues.



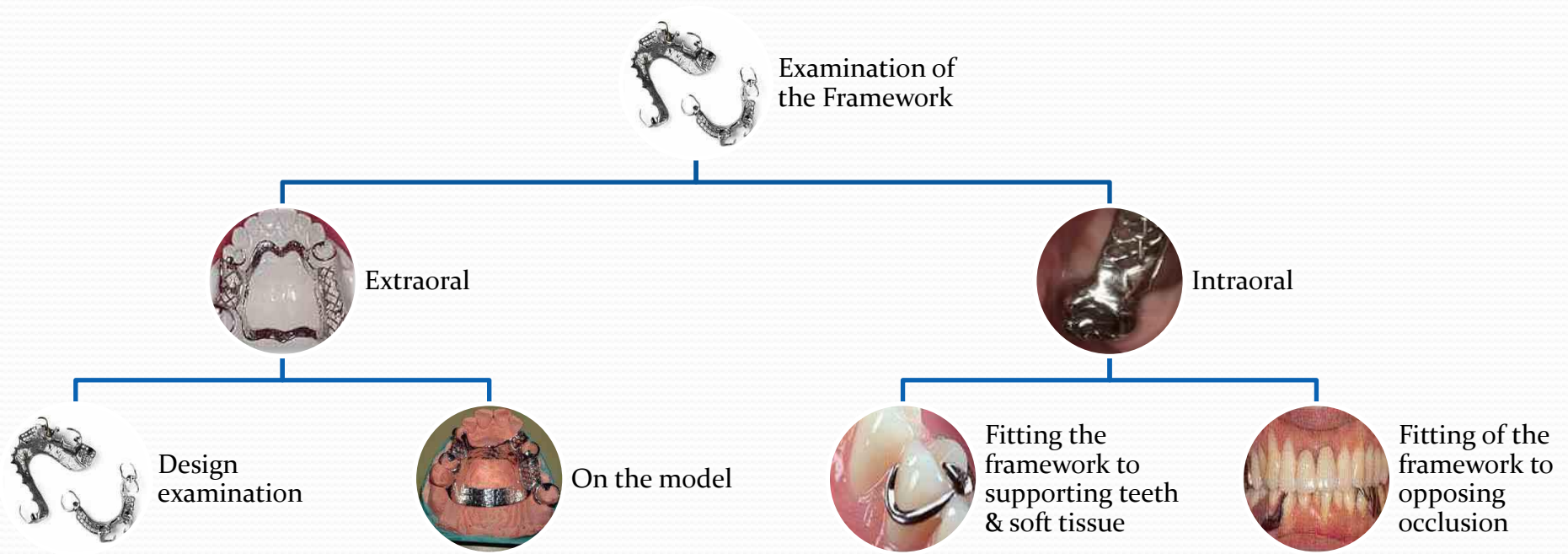
- Uncontrolled forces can produce movement of the remaining teeth and cause damage to the soft tissues and supporting bone.



- The practitioner must remember that the tip of each retentive clasp is designed to lie passively in a measured undercut, if the tip of a retentive clasp cannot reach this undercut it will not be passive instead it will exert potentially damaging forces on the associated abutment.



Examination of Framework



EXAMINATION OF FRAMEWORK

1-Design examination

- The practitioner should insure that all directions have been followed and the metal framework accurately fits the master cast.



EXAMINATION OF FRAMEWORK

1-Design examination

- Was the proposed design closely followed?
 - 1) has the major connector been positioned as requested?



EXAMINATION OF FRAMEWORK

1-Design examination

- 2-Are the finish lines for acrylic resin denture base properly positioned?
- 3-Have the required rests been included?



EXAMINATION OF FRAMEWORK

1-Design examination

- 4-Are the designated clasp assemblies present and complete?
- 5-Do the retentive clasp arms display the appropriate sizes, shapes, and positions?
- 6-Have soft tissue undercuts been handled as directed?

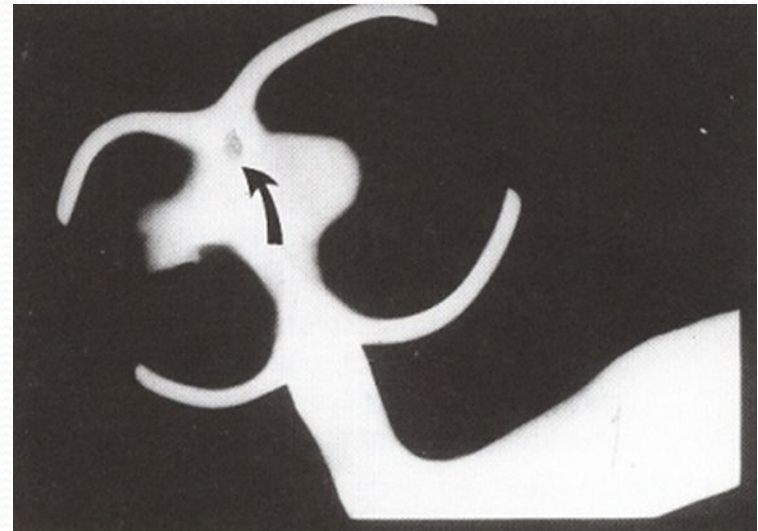
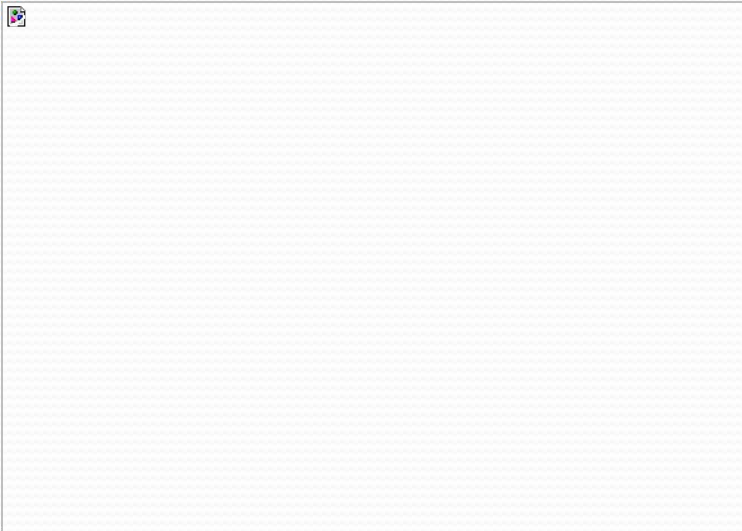


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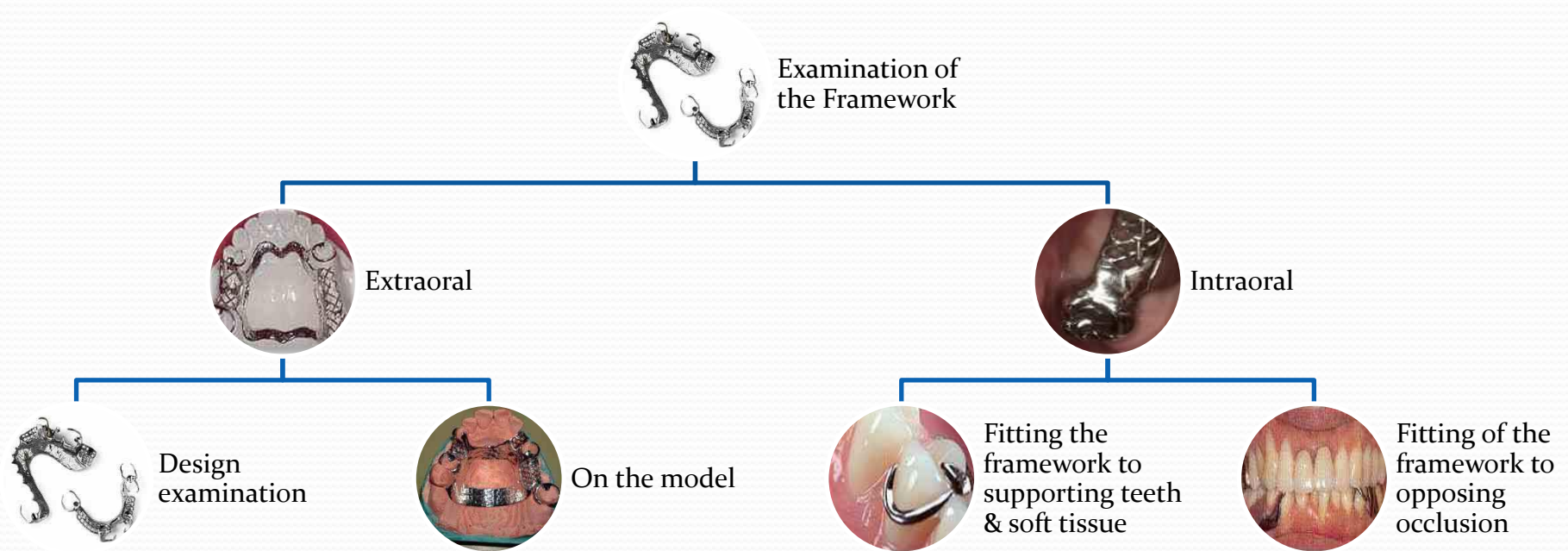
EXAMINATION OF FRAMEWORK

1-Design examination

- Both internal and external surfaces of the framework should be examined for nodules and other artifacts that may prevent complete seating or produce patient discomfort.



Examination of Framework



2-Does the framework fit the master cast accurately?

- A properly constructed framework should fit tightly against the cast.
 - 1- Are the rests fully seated in their preparation?
- ❑ If a framework doesn't fit the master cast, it's highly unlikely that it will fit the mouth.



2-Does the framework fit the master cast accurately?

2- Are reciprocal clasp arms and/or lingual plating in intimate contact with tooth surfaces?

- ❑ Spaces that sits in this locations are potentially damaging because food depries collect between the framework and the teeth



2-Does the framework fit the master cast accurately?

3- Have finishing and polishing procedures been carried out correctly?

- ❑ The tissue surface if the framework should be finished to a fine matte texture.
- ❑ Retentive clasp should display smoothly tapering contours while reciprocal clasps should display consistent thicknesses.

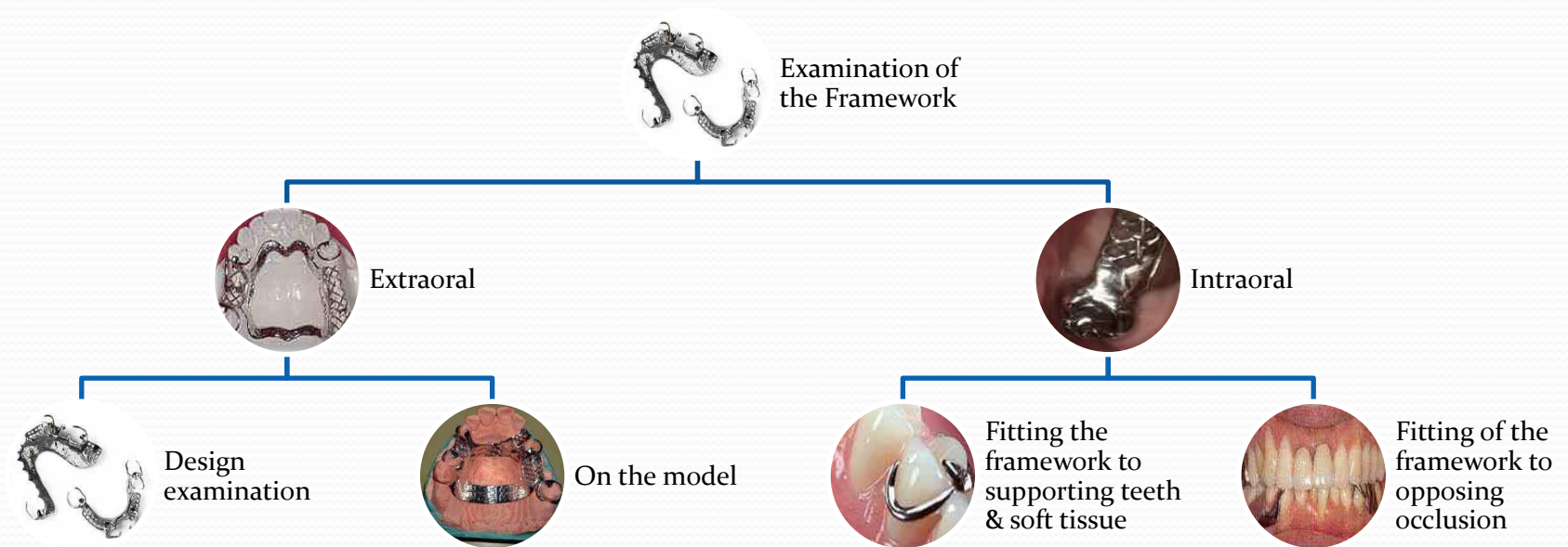


Does the framework fit the master cast accurately?

- Is the major connector sufficiently rigid?



Examination of Framework



B-INTRAORAL EXAMINATION

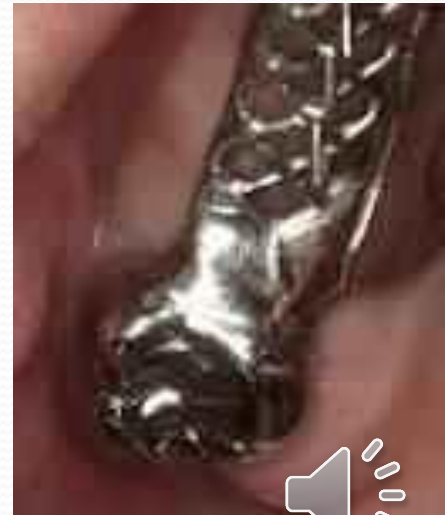
- Objectives:

1. *Fit the framework to the teeth and soft tissues of the supporting arch.*
2. *Adjust the framework to the opposing occlusion.*



B-INRAORAL EXMINATION

*1-Fit the framework to
the teeth and soft
tissues of the
supporting arch.*



B-INTRAORAL EXAMINATION

Disclosing Media



Disclosing Media

- To properly adjust a removable partial denture framework, the practitioner must identify areas of interference and binding. This may be accomplished using a number of commercially available disclosing media.



Disclosing Media

- *Tow types of disclosing media*
- 1-spray type.
- 2-disclosing wax



Disclosing Media

1-Spray-type disclosing media are often used during fitting procedures. While sprays are convenient, they are often messy and difficult to control in the presence of moisture. Consequently, spray-type disclosing media should not be used for intraoral fitting procedures.



Disclosing Media

2-disclosing wax

Advantage:

The greatest advantage of disclosing wax over other disclosing agents is it is:

A- Three-dimensional nature.

B-Because the wax is translucent, it provides clear visual evidence regarding framework adaption.



Application and use of disclosing wax

armamentarium

A- disclosing wax itself,

B-a heat source,

C- and a suitable waxing instrument.

Disclosing wax generally is supplied in a glass or plastic container.



Disclosing Media

NB:

To prevent contamination of the remaining material, a small amount of disclosing wax is removed from the container using a clean tongue depressor.



Disclosing Media

STEPS:

1-A number seven wax spatula or a roach carver is then heated and used to gather disclosing wax.

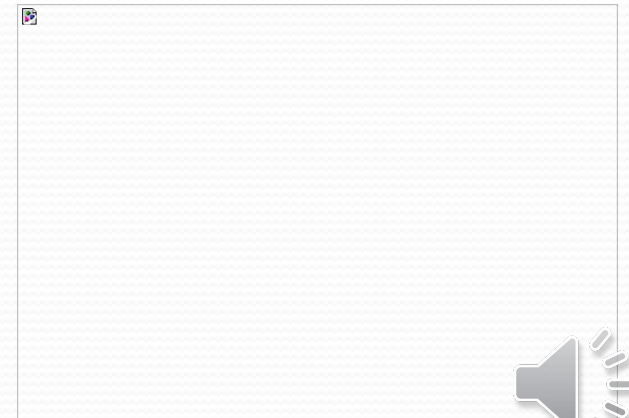


Disclosing Media

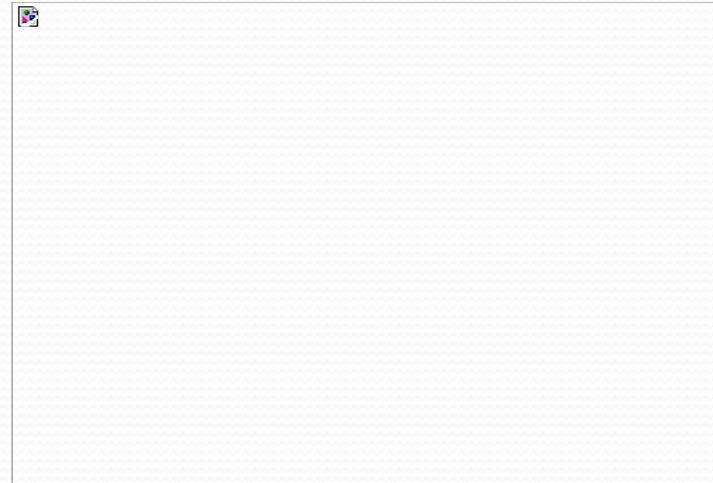
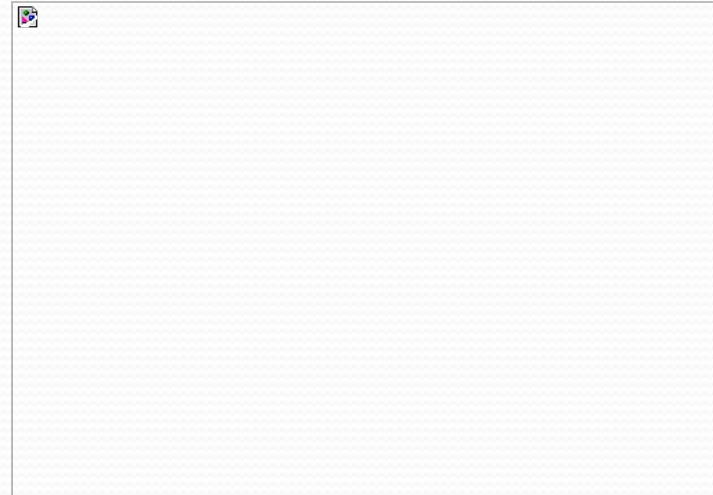
2- The melted disclosing wax is applied to framework surfaces that will contact the teeth. A thin, even coat of wax is desired.



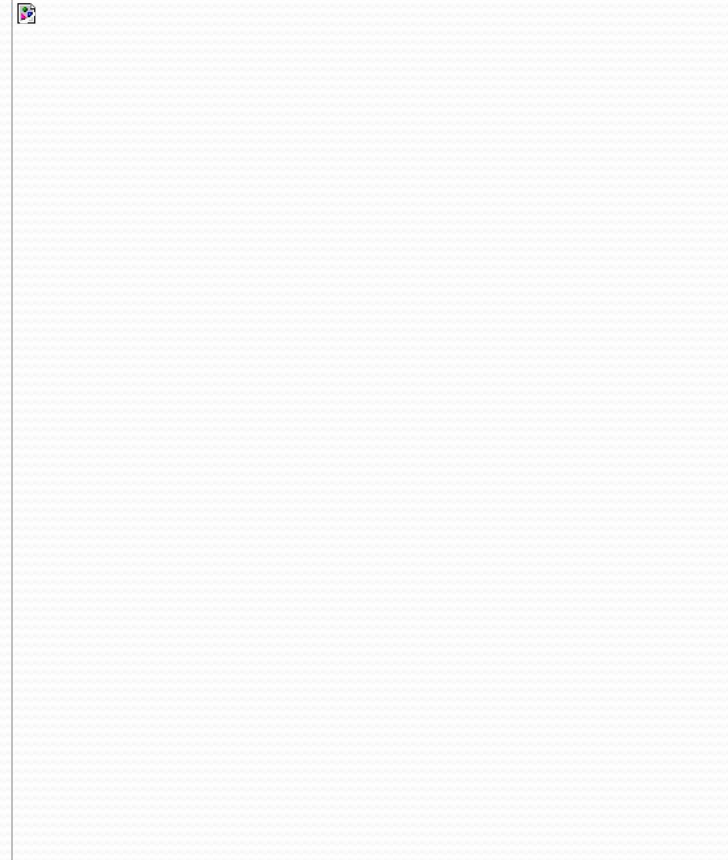
3-Finger pressure is applied in the planned path of insertion



Adjusting the framework:



Adjusting the framework:



4-If significant resistance is met, the framework should be removed and examined for signs of distortion.

5-When the framework is in place, firm vertical pressure is applied to rests.



NB:

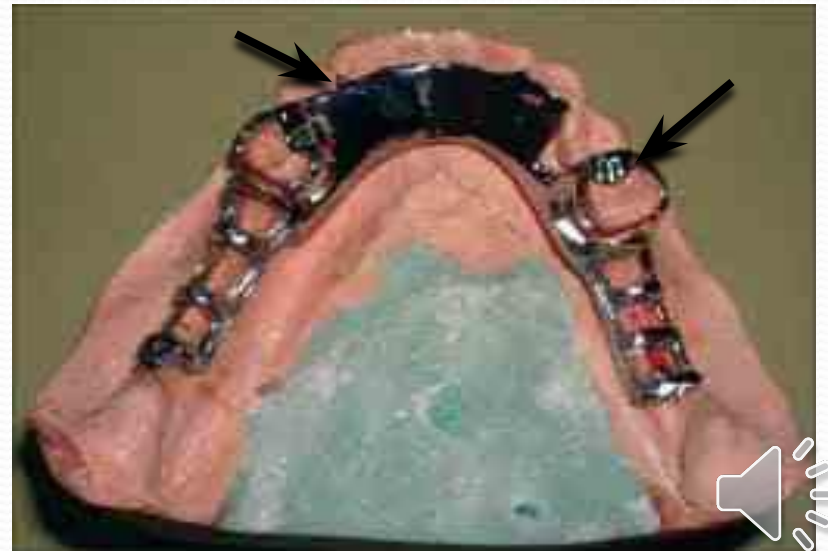
In case of a distal extension framework, no pressure should be applied over the distal extension area.

This would cause the framework to rock and would produce misleading results in the disclosing wax.



Areas of show-through represent interferences that prevent complete seating of the framework.

The most common parts of interference occur at the shoulders of circumferential clasps and at the interproximal extensions of lingual plate.



Areas that have been defined as true interferences must be carefully machined. This is accomplished using a multifluted carbide bur in a high-speed hand piece.



2-Fitting the framework to the opposing occlusion

The simplest and most reliable method for correcting occlusal errors is to have the patient close into the desired position with nothing in the mouth. The practitioner must insure that the same pattern of contact exists when each framework is placed individually



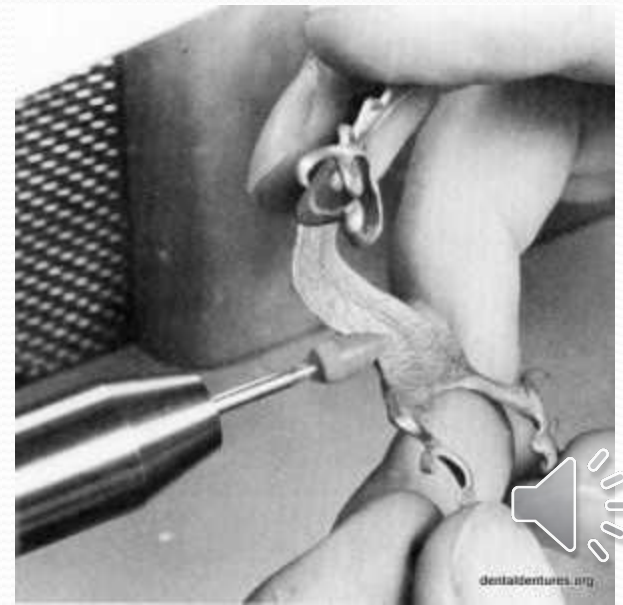
In a clinical setting, one framework is positioned in the mouth and the patient is guided into the appropriate closure.

The amount of occlusal interference is determined by observing the amount of space between the remaining natural teeth.



Undesirable contact is eliminated by grinding the offending areas of the metal framework.

To promote patient comfort, all adjustments should be accomplished with the framework out the mouth.



When the patient's original contacts have been reestablished, the practitioner should evaluate all eccentric movements.

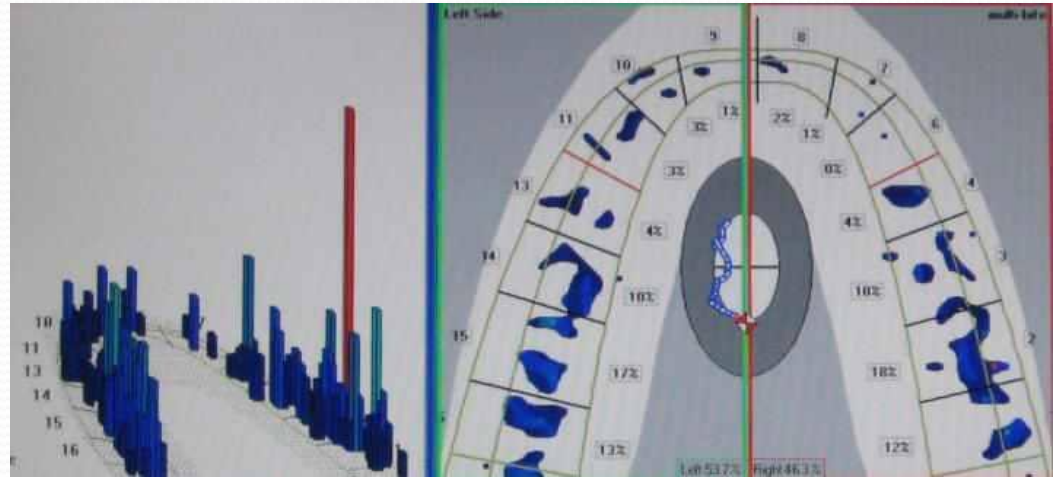
This is accomplished by having the patient make lateral and protrusive movements with articulating paper between the teeth.

Eccentric interferences are corrected using the same armamentarium.



NEW TREND

- Occlusal interferences can also be detected using T.B SCAN



If maxillary and mandibular frameworks have been constructed, the framework should be fitted individually.

After each framework has been corrected individually, maxillary and mandibular frameworks should be placed simultaneously.

Any interference will occur between the metal of the opposing frameworks, therefore a final correction is made using a multifluted carbide bur in a high-speed hand piece.



In rare instances the practitioner may choose to reshape the opposing tooth rather than perform additional adjustment on a removable partial denture framework. Reduction of opposing teeth should be avoided if possible.



Finishing and polishing ground surfaces



Stewart's



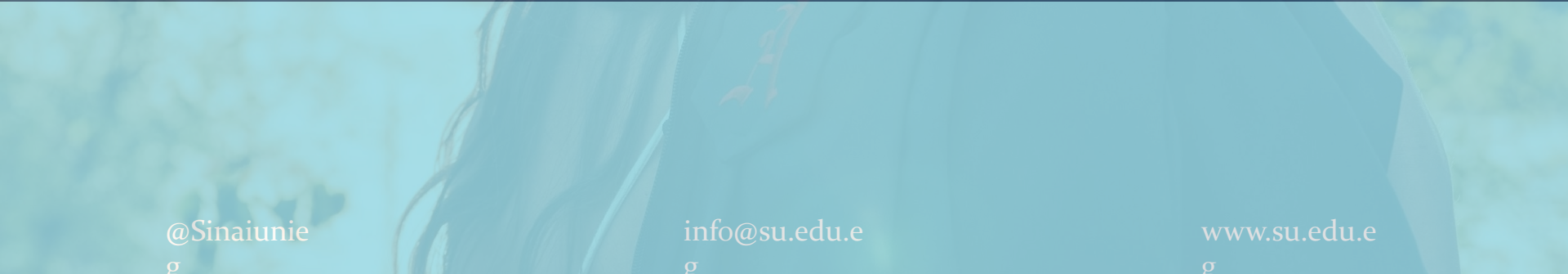
After the frame work has been fitted to the supporting teeth, and opposing occlusal surfaces, the corrected surfaces must be finished and polished.

This is accomplished using mounted stones as well as carborundum-impregnated wheels and points

.

The operator must be careful not to destroy the fit of the removable partial denture components





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THANK YOU

For any questions feel
free

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