



Rest and Rest Seat

Removable Partial Denture

LEARNING OUTCOMES

- Discuss the importance of rest and rest seat
- Describe the ideal features of rest seats (occlusal, lingual, incisal)
- Determine the position of primary and secondary rests



DEFINITION

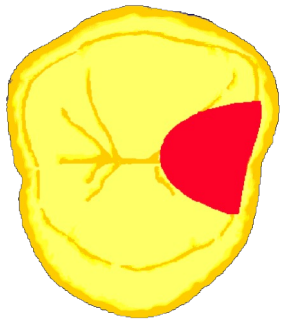


REST:

- Component of a RPD in contact with tooth surface that provides vertical support and transmits occlusal load to abutments.
- Rigid structure,
- Part of the metallic framework



REST SEAT: A prepared surface on the abutment to receive the rest



The topography of the rest should restore the topography of the tooth before the rest seat preparation

FUNCTION OF REST

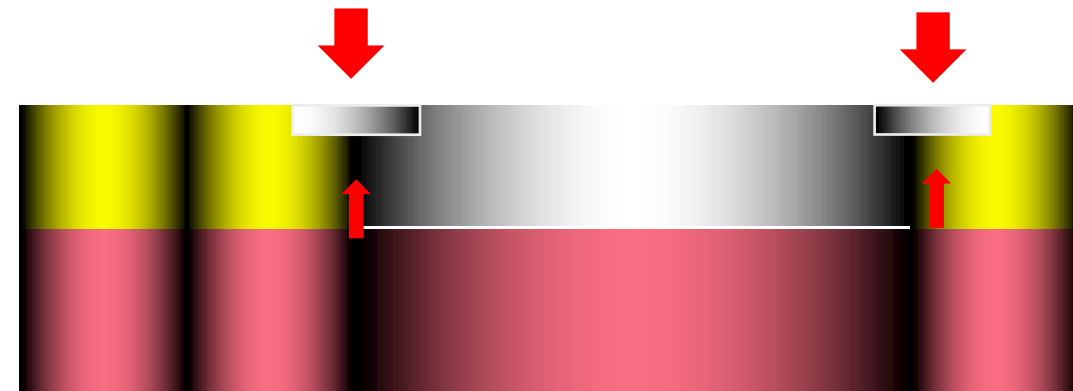
Primary

1. To provide vertical support (Occluso-gingival direction)
2. To direct and distribute occlusal load to abutment teeth.



Secondary

3. To maintain components in their positions, helping stabilization and retention: neutralizing rotational movements
4. To maintain established occlusal relationships
5. To prevent impingement of soft tissues
7. To maintain the correct relationship clap and abutment
8. To restore occlusal plane discrepancies

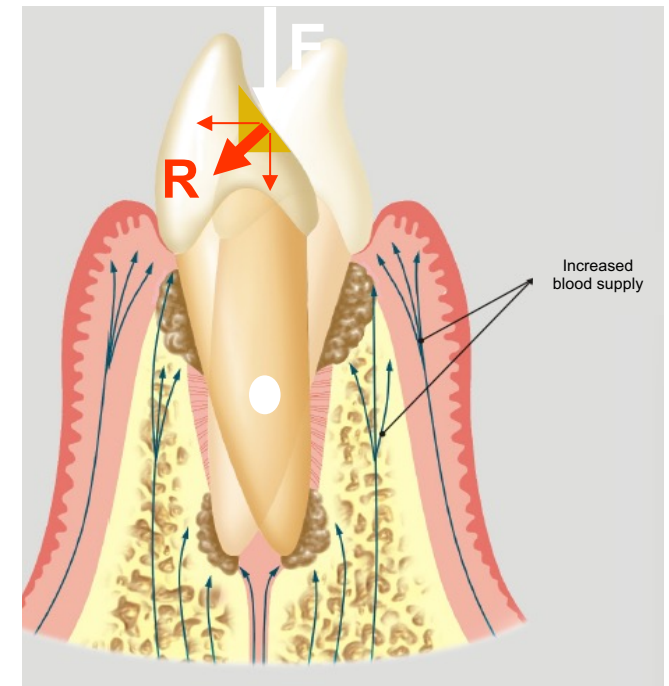
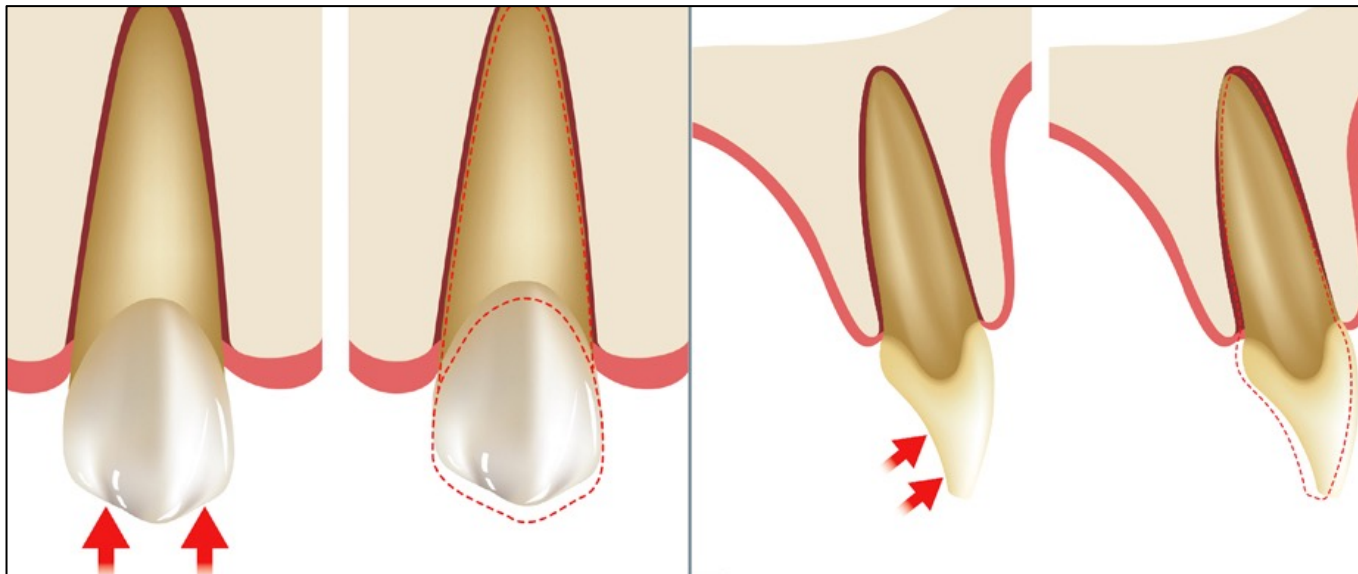


FUNCTION OF REST



Directs and distributes occlusal load to abutment teeth

- Axial direction: the most effective resistance is provided if the tooth is stressed along its long axis, without damaging the abutment



Types of Rest and Rest Seat



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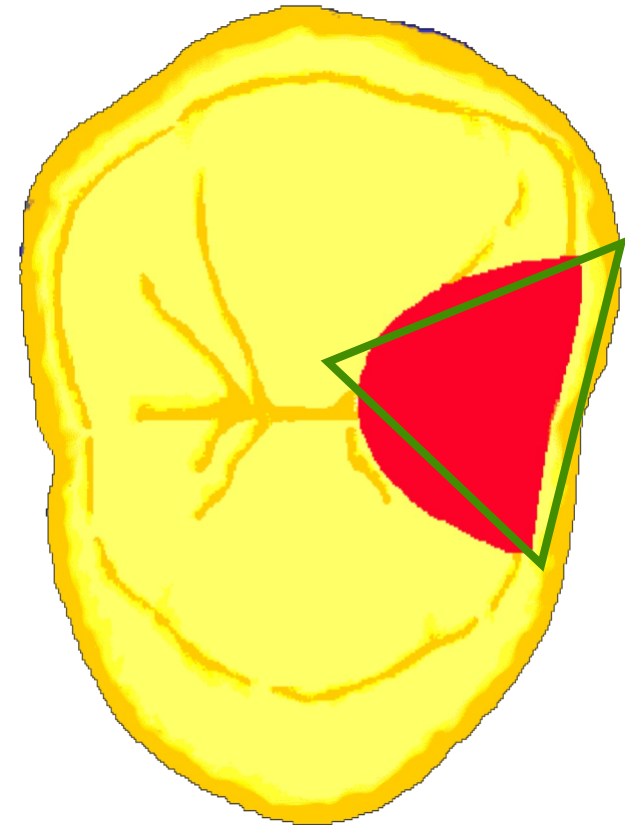


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- Location: Occlusal, Lingual (cingulum) and Incisal
- Function: Direct and Indirect

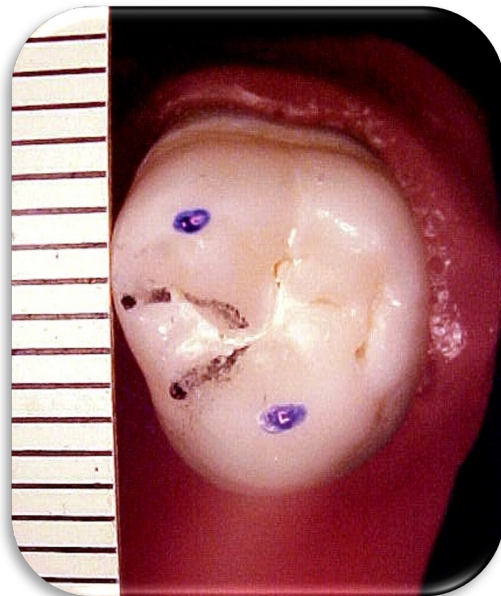
Occlusal Rest and Rest Seat

- Rounded triangular shape

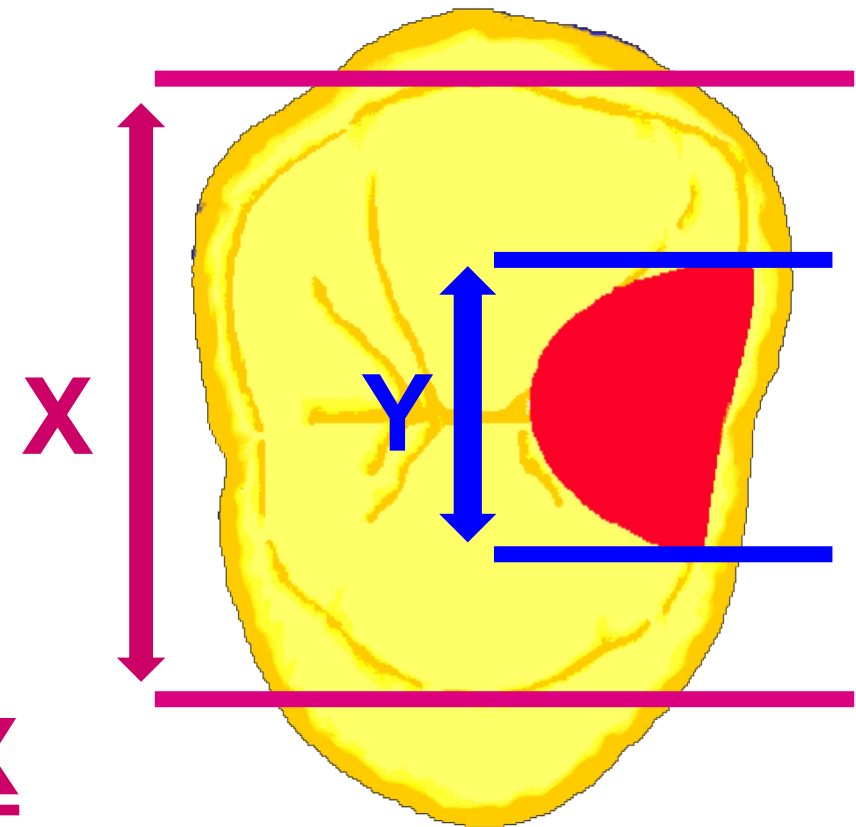


Occlusal Rest and Rest Seat

- Rounded triangular shape
- Width (B/L) $\frac{1}{2}$ inter-cusp distance

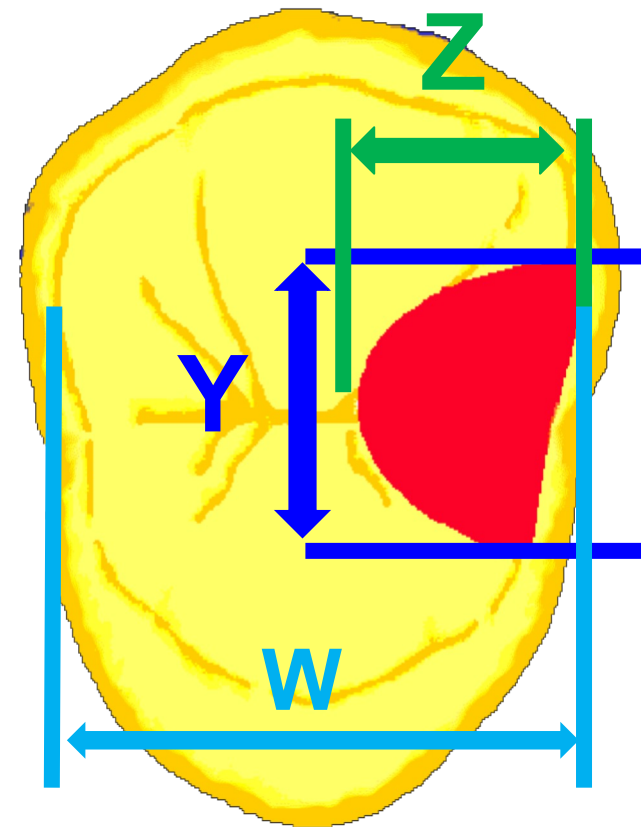


$$Y = \frac{X}{2}$$



Occlusal Rest and Rest Seat

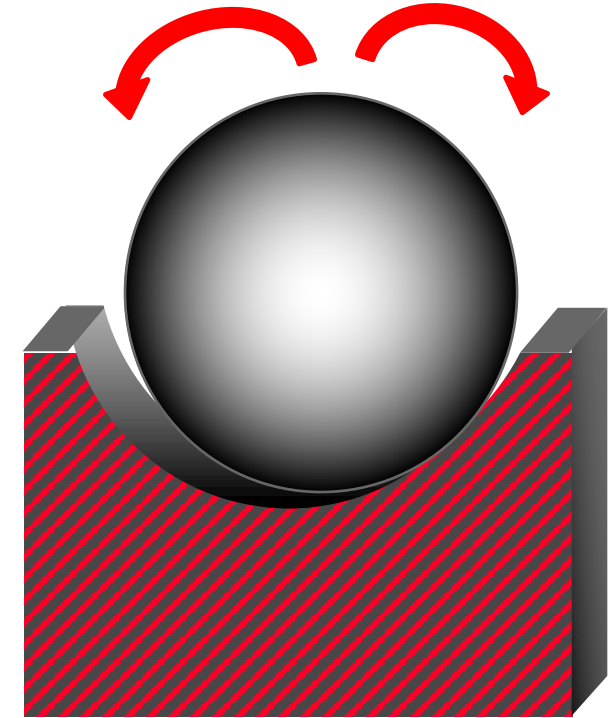
- Rounded triangular shape
- Width (B/L) $\frac{1}{2}$ inter-cusp distance
- M/D equal or larger B/L size



$$Z = \frac{1}{3} W \text{ to } \frac{1}{2} W \quad Z \geq Y$$

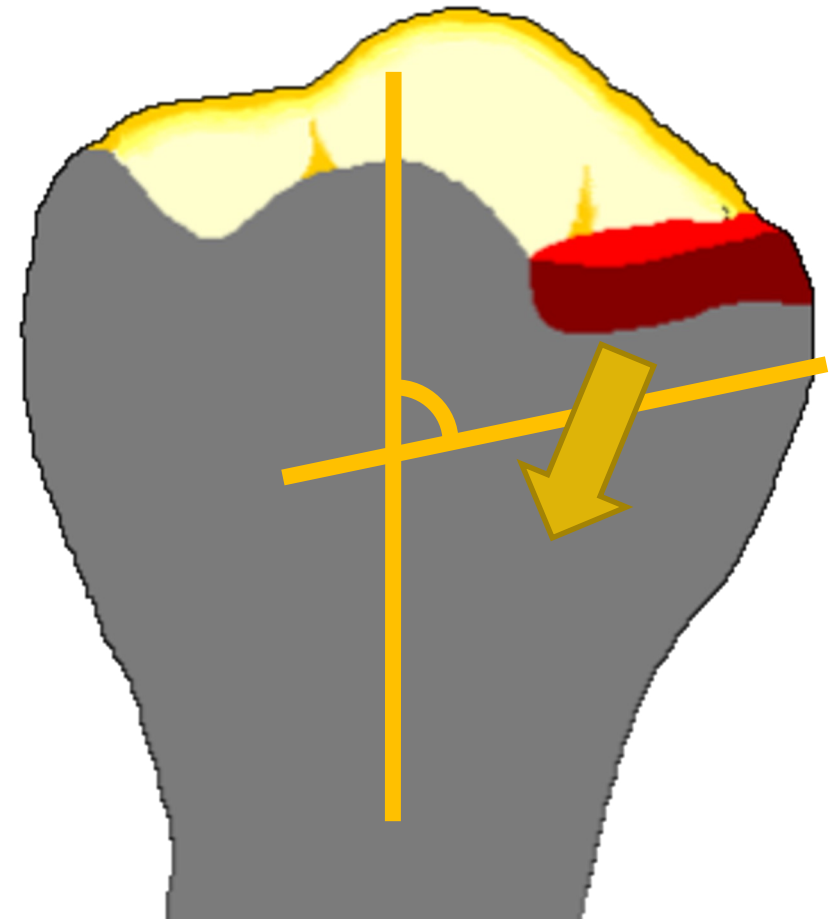
Occlusal Rest and Rest Seat

- Rounded triangular shape
- Width (B/L) $\frac{1}{2}$ inter-cusp distance
- M/D equal or larger B/L size
- Floor concave, rounded



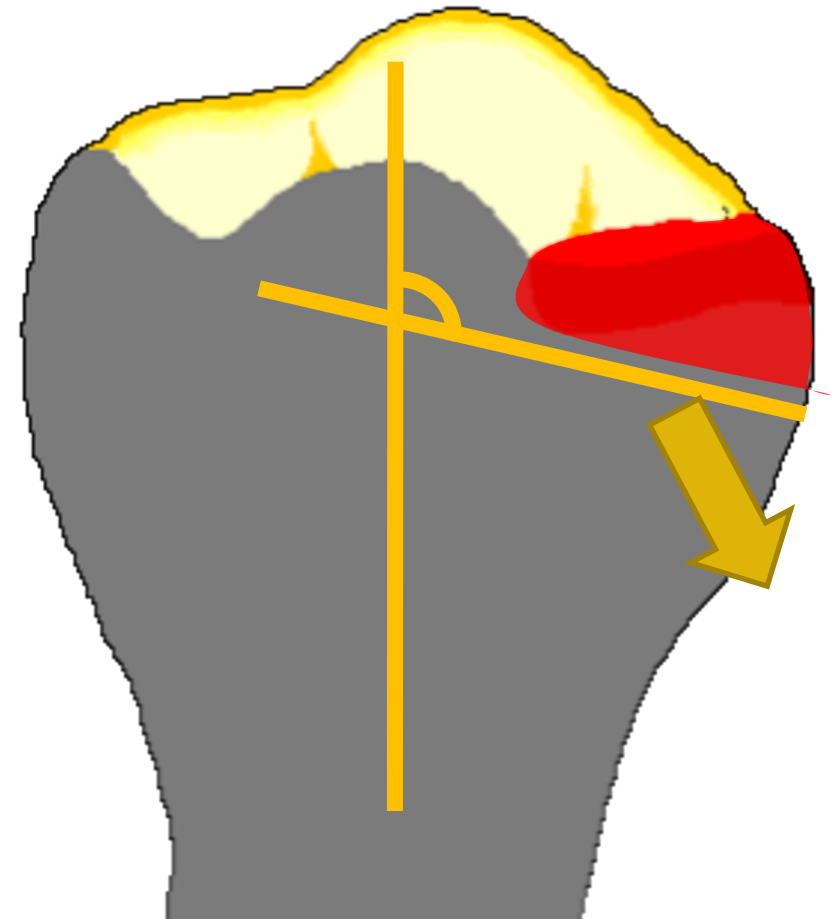
Occlusal Rest and Rest Seat

- Rounded triangular shape
- Width (B/L) $\frac{1}{2}$ inter-cusp distance
- M/D equal or larger B/L size
- Floor concave, rounded
- Slightly inclined apically (less than 90°)



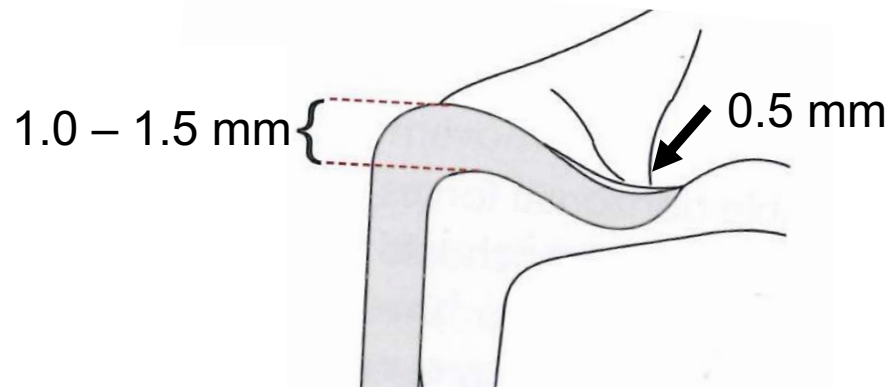
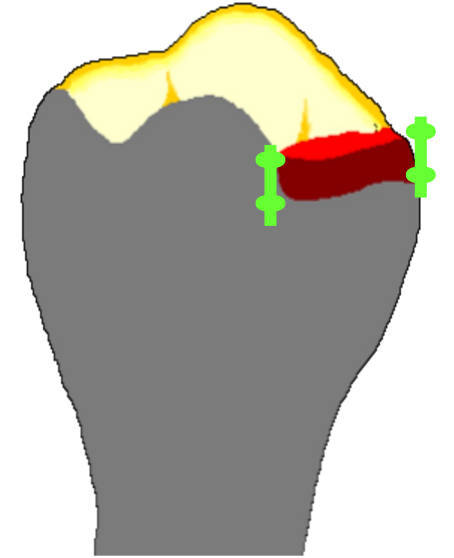
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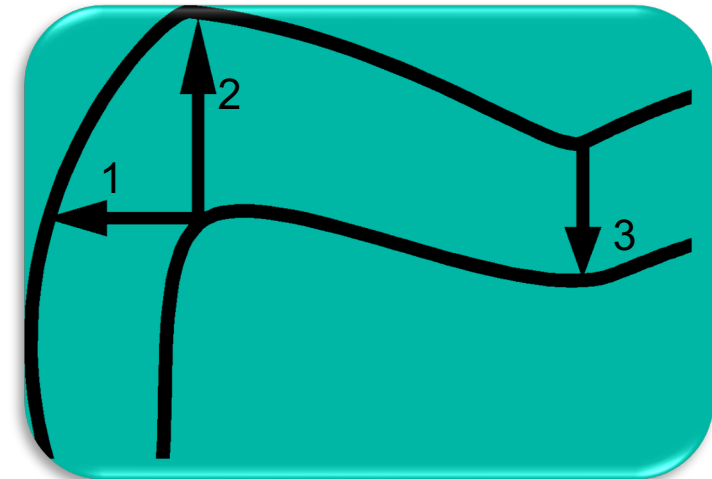
Occlusal Rest and Rest Seat

- Rounded triangular shape
- Width (B/L) $\frac{1}{2}$ inter-cusp distance
- M/D equal or larger B/L size
- Floor concave, rounded
- Slightly inclined apically (less than 90°)
- 0.5 mm thick at its point and 1.0 – 1.5 mm marginal ridge

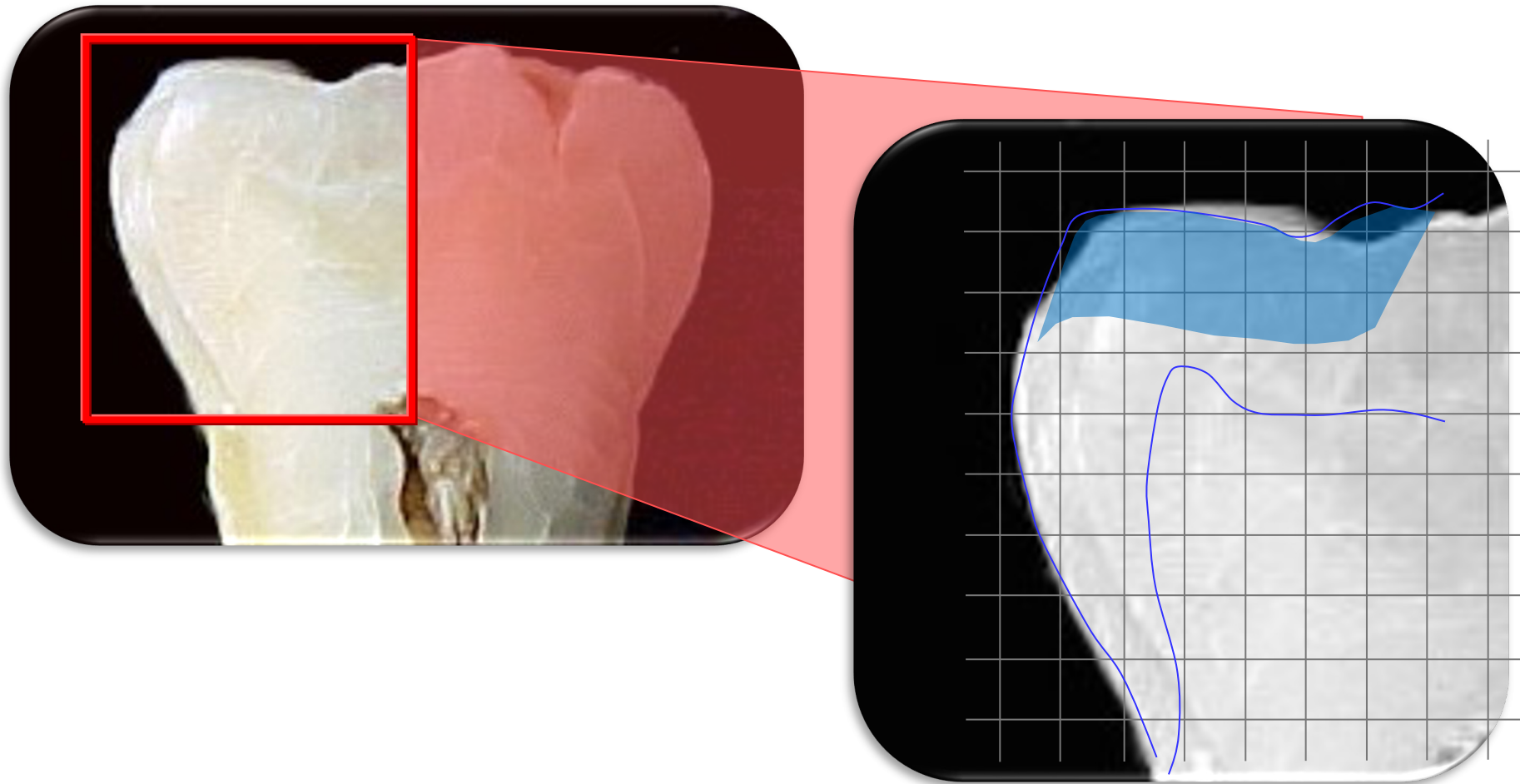


Enamel Thickness

	Molar	Premolar	
Superior	1.25	1.00	1
	1.40	1.25	2
	1.25	1.00	3
Inferior	1.25	1.10	1
	1.50	1.25	2
	1.28	0.80	3

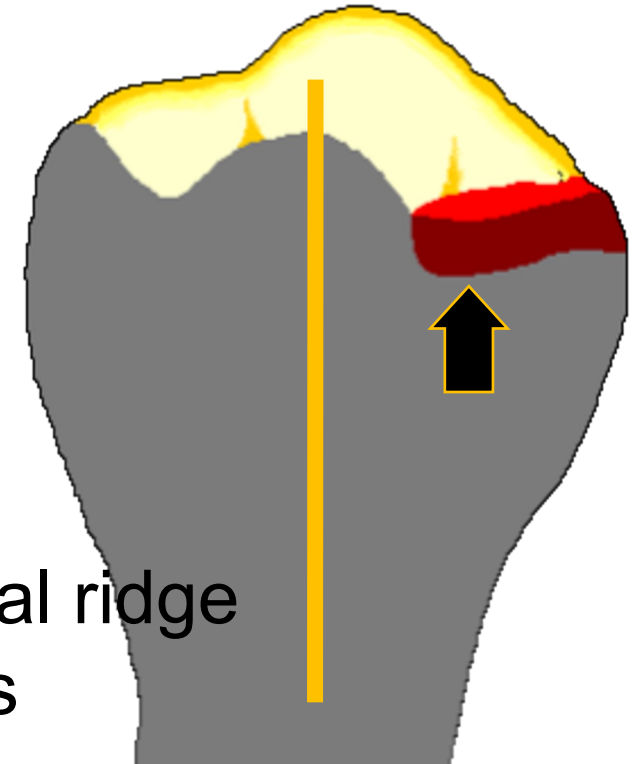


Enamel Thickness



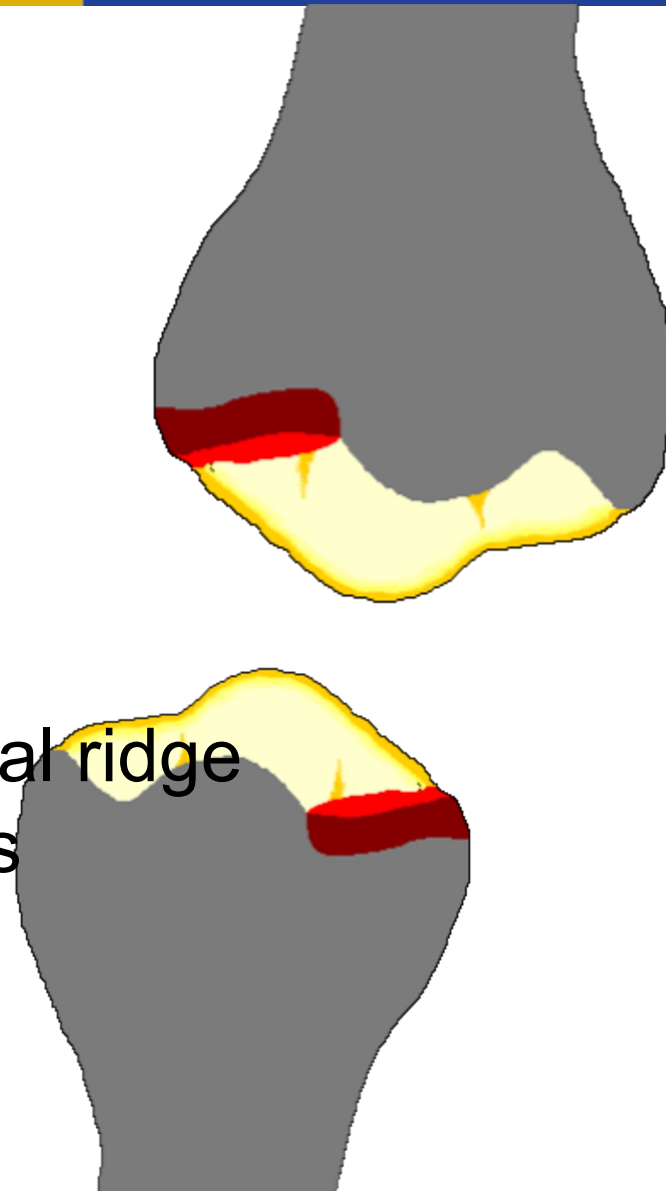
Occlusal Rest and Rest Seat

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- M/D equal or larger B/L size
- Floor concave, rounded
- Slightly inclined apically (less than 90°)
- 0.5 mm thick at its point and 1.0 – 1.5 mm marginal ridge
- Deepest part of the rest seat close to the long axis



Occlusal Rest and Rest Seat

- Rounded triangular shape
- Width (B/L) $\frac{1}{2}$ inter-cusp distance
- M/D equal or larger B/L size
- Floor concave, rounded
- Slightly inclined apically (less than 90°)
- 0.5 mm thick at its point and 1.0 – 1.5 mm marginal ridge
- Deepest part of the rest seat close to the long axis
- Normal occlusal contact



Types of Rest and Rest Seat



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Types of Rest and Rest Seat



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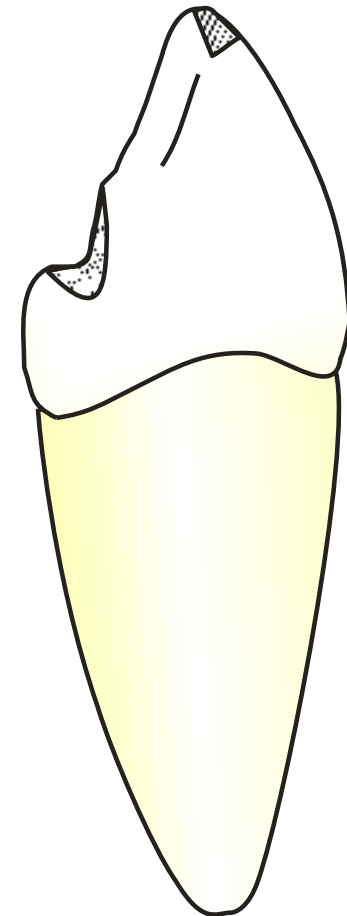


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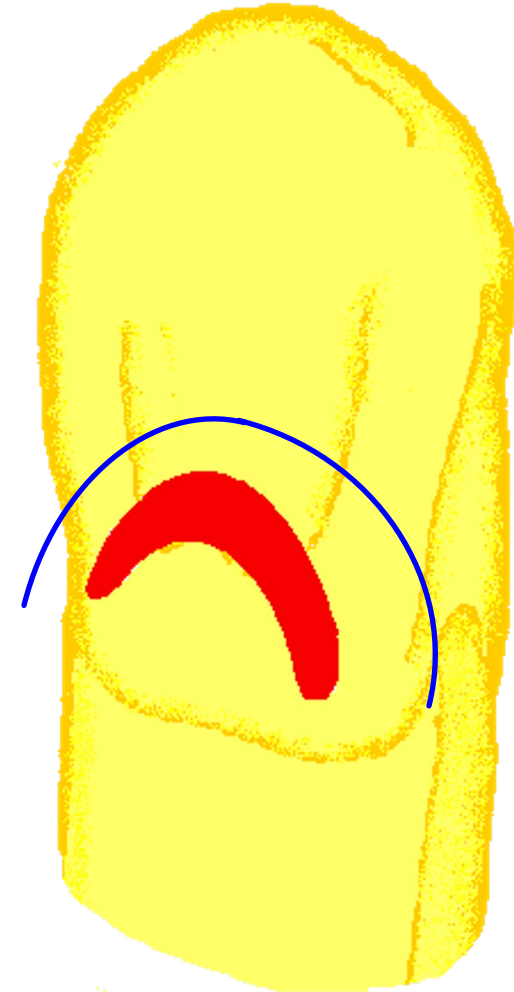
Lingual or Cingulum Rest and Rest Seat

- Cingulum of anterior teeth



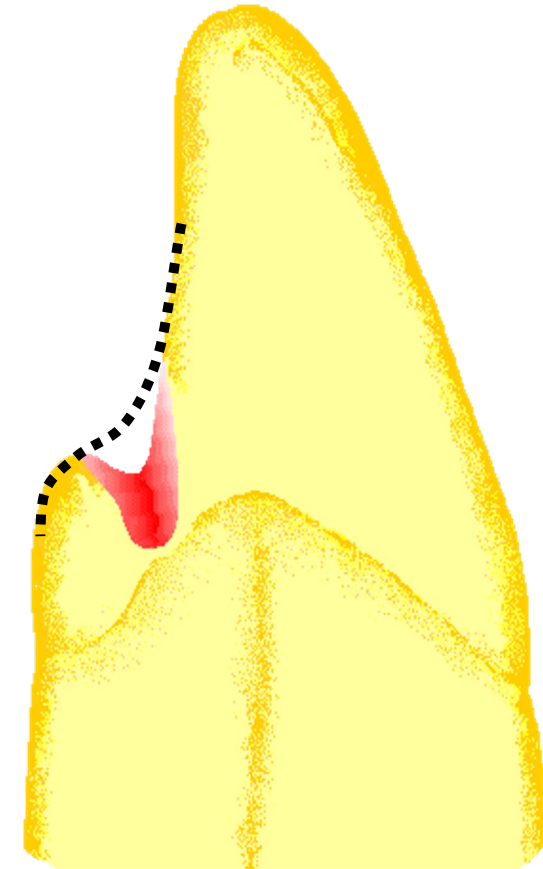
Lingual or Cingulum Rest and Rest Seat

- Cingulum of anterior teeth
- Convex M/D



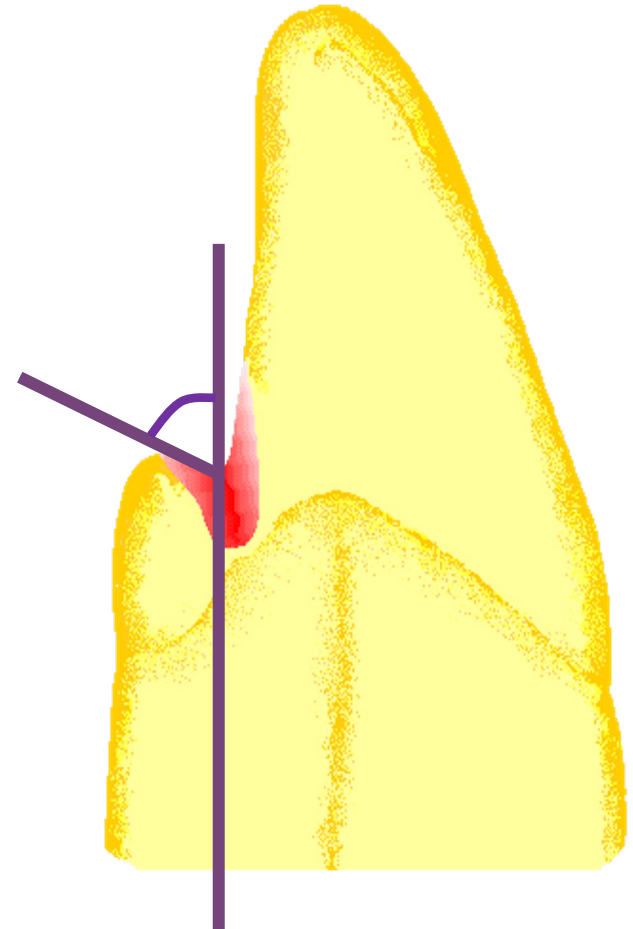
Lingual or Cingulum Rest and Rest Seat

- Cingulum of anterior teeth
- Convex M/D
- Concave B/L, V shaped



Lingual or Cingulum Rest and Rest Seat

- Cingulum of anterior teeth
- Convex M/D
- Concave B/L, V shaped
- Floor less than 90°

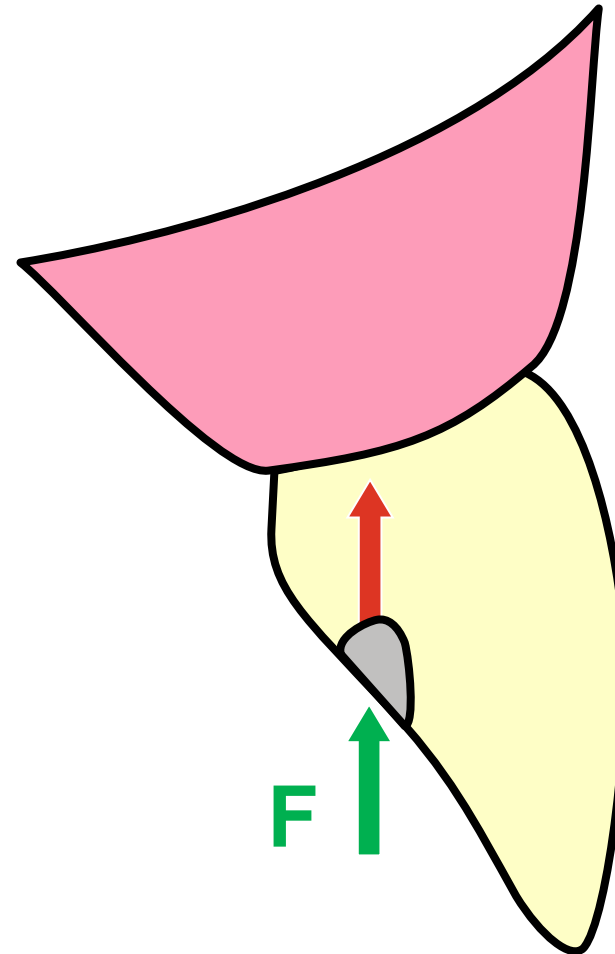
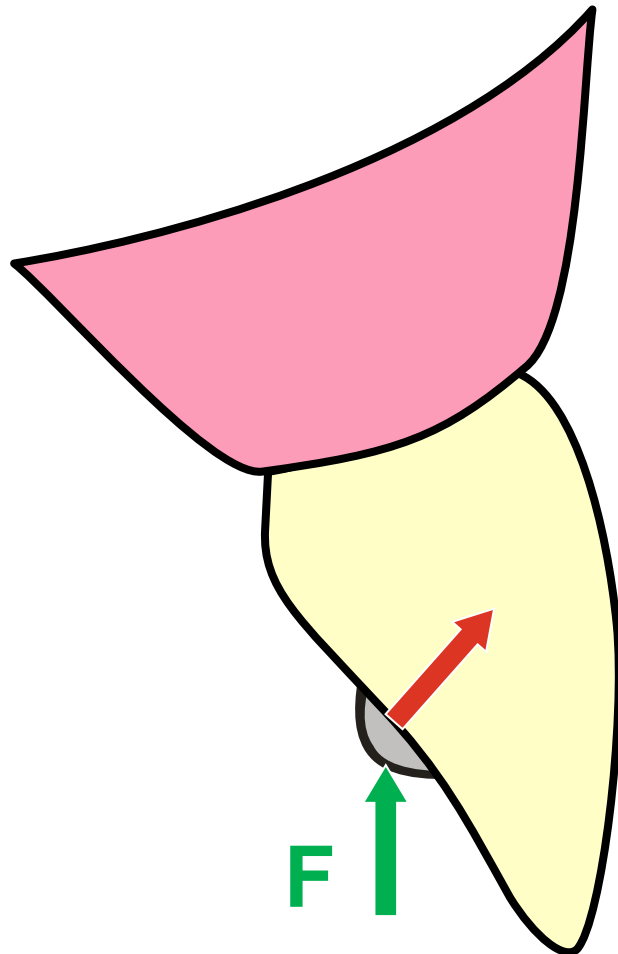


Lingual or Cingulum Rest and Rest Seat

- Cingulum of anterior teeth
- Convex M/D
- Concave B/L, V shaped
- Floor less than 90°
- Rounded, no sharp line angles
- Minimum reduction 0.8 mm
- Normal occlusal contact



Lingual or Cingulum Rest and Rest Seat

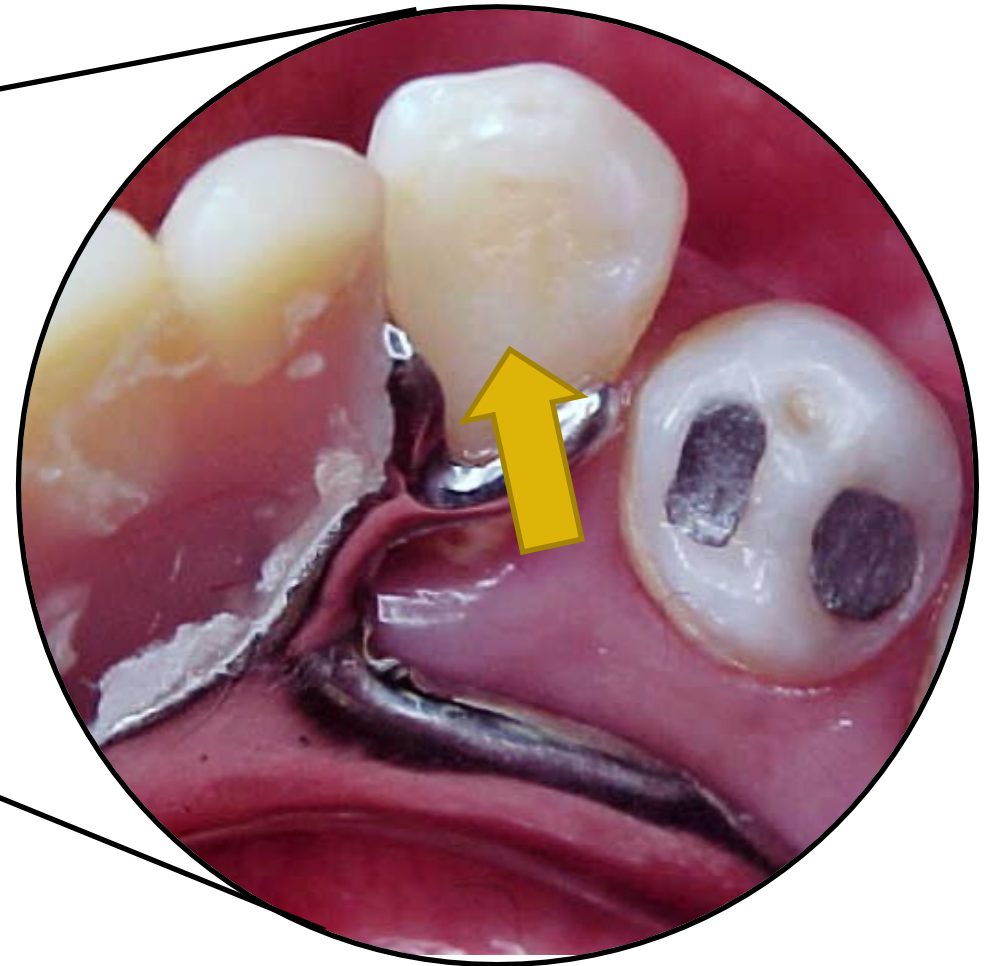
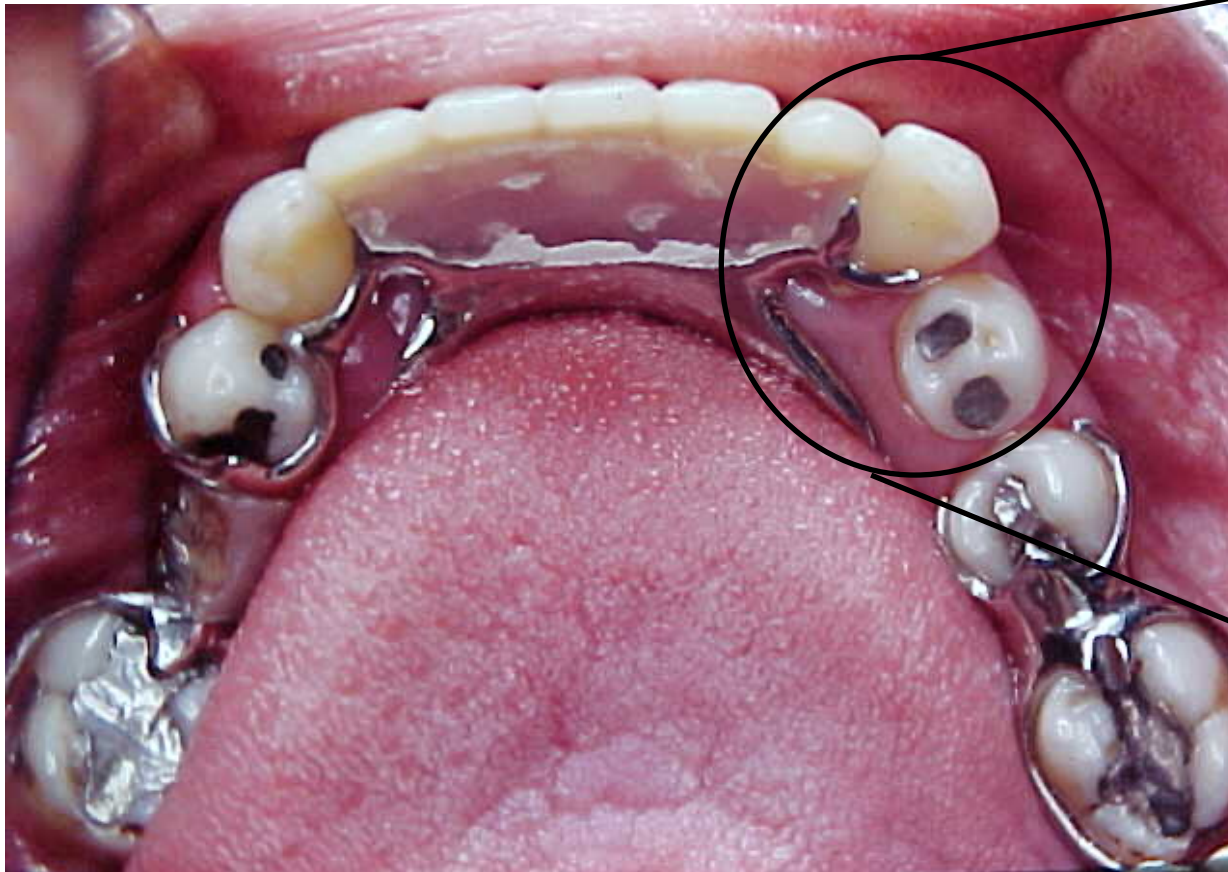


Lingual or Cingulum Rest and Rest Seat

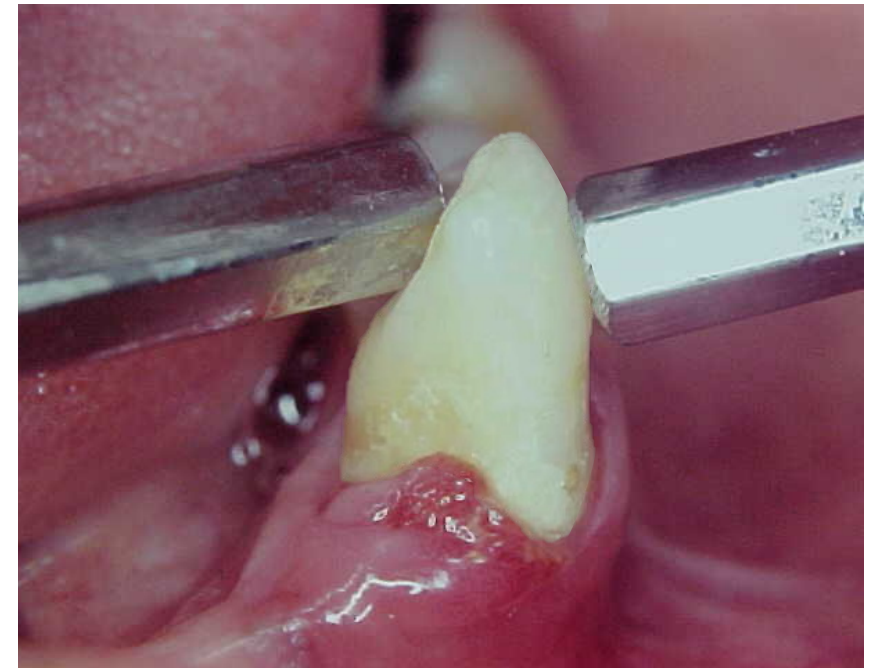
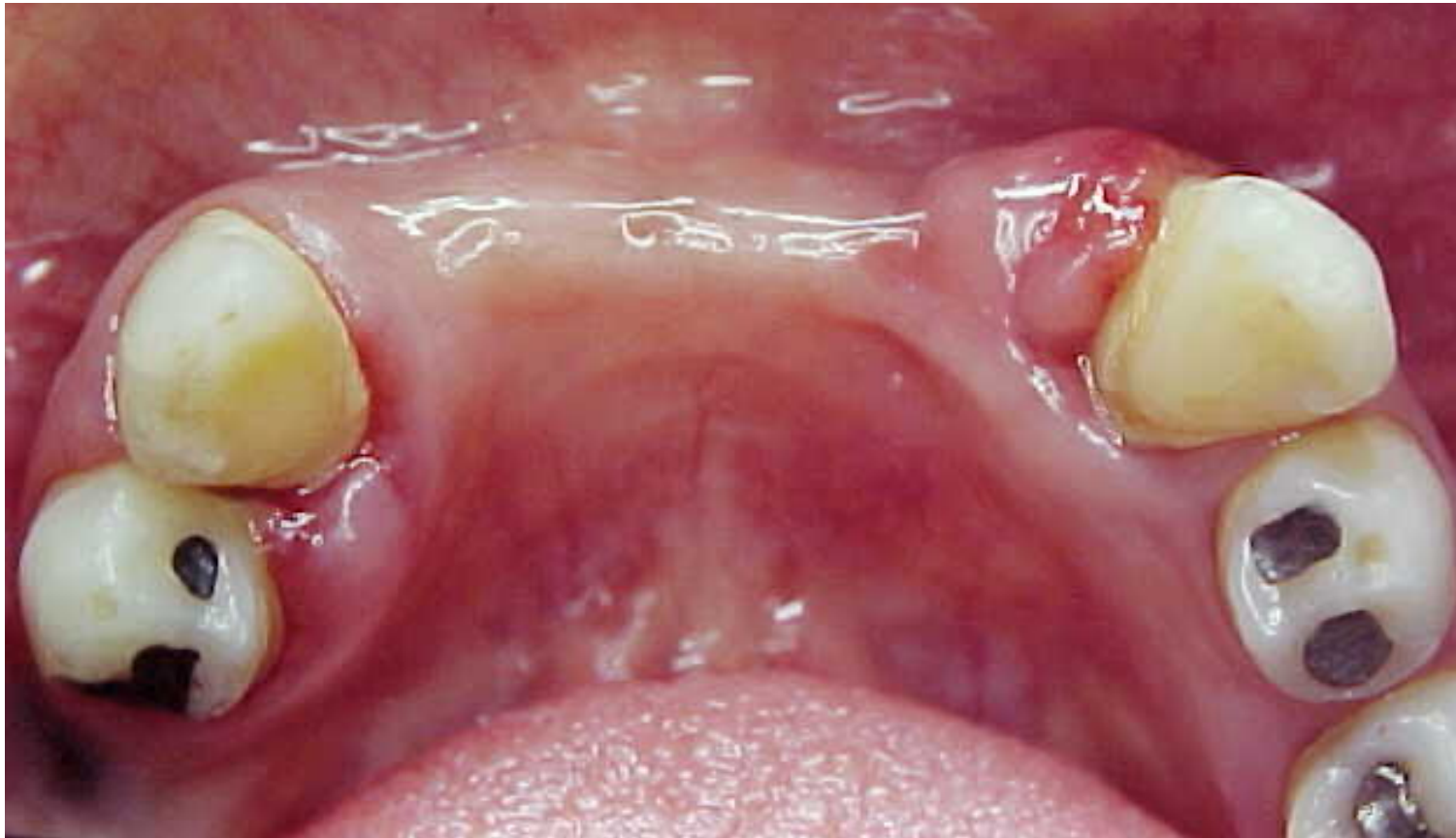


Lingual or Cingulum Rest and Rest Seat

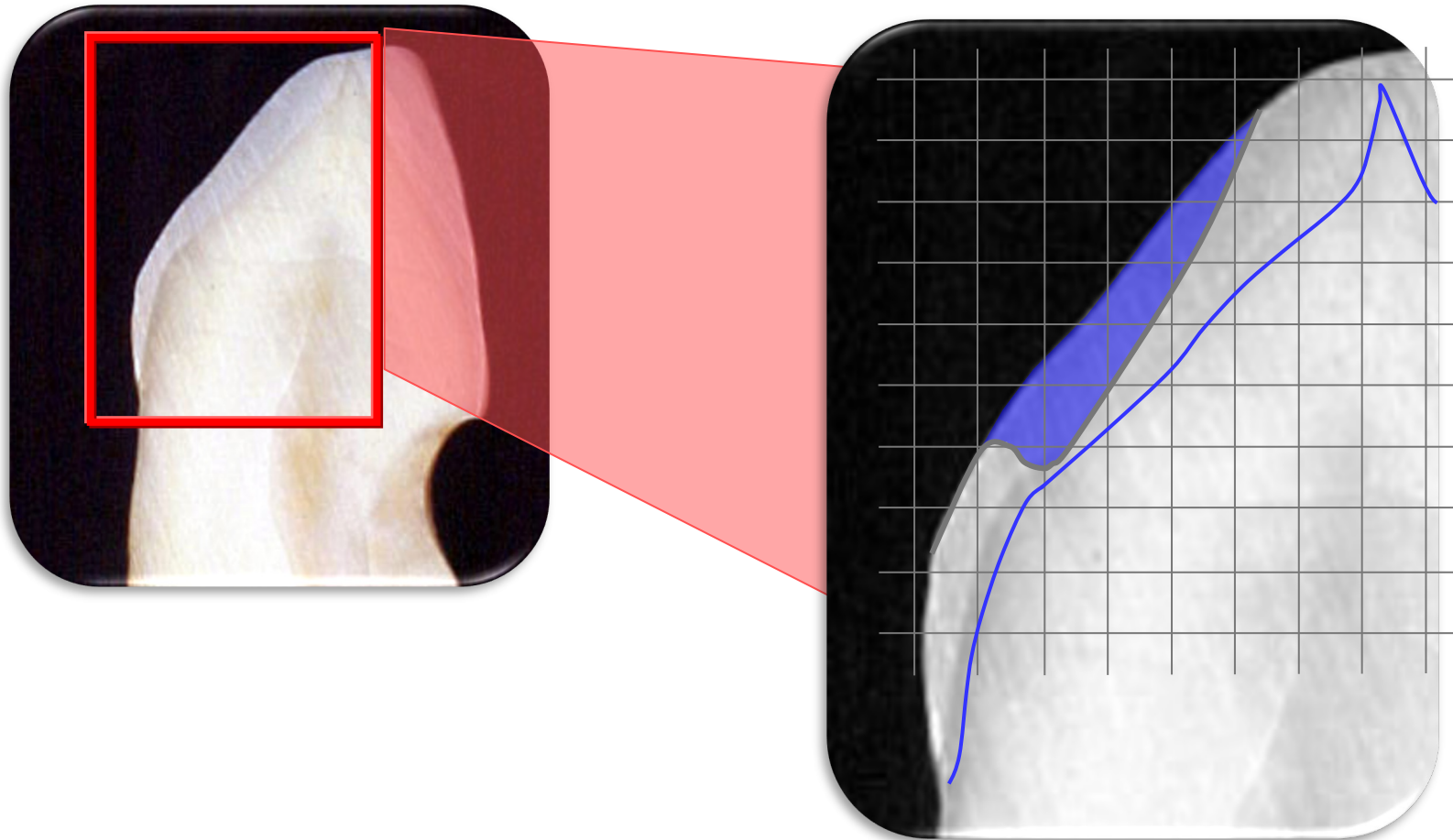
Rest with no rest seat



Lingual or Cingulum Rest and Rest Seat

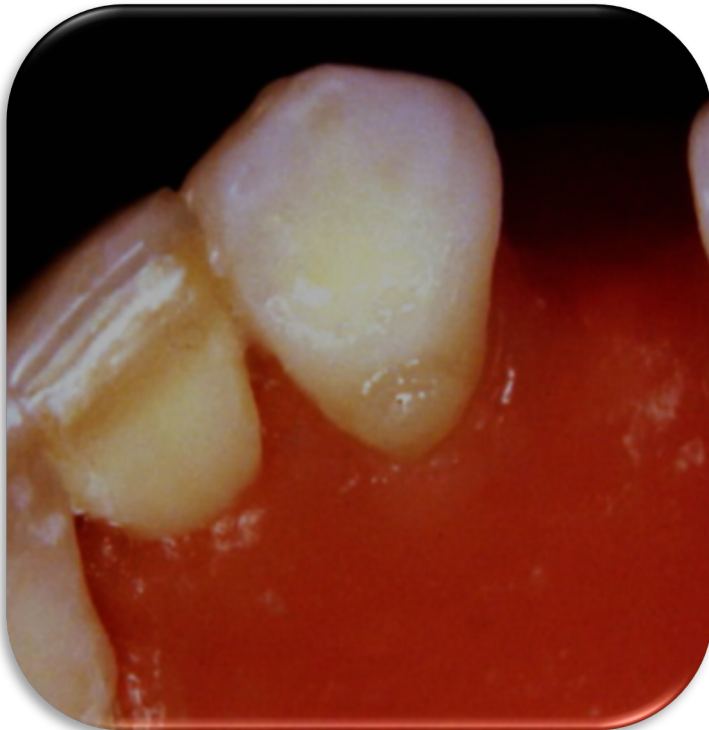


Lingual or Cingulum Rest and Rest Seat



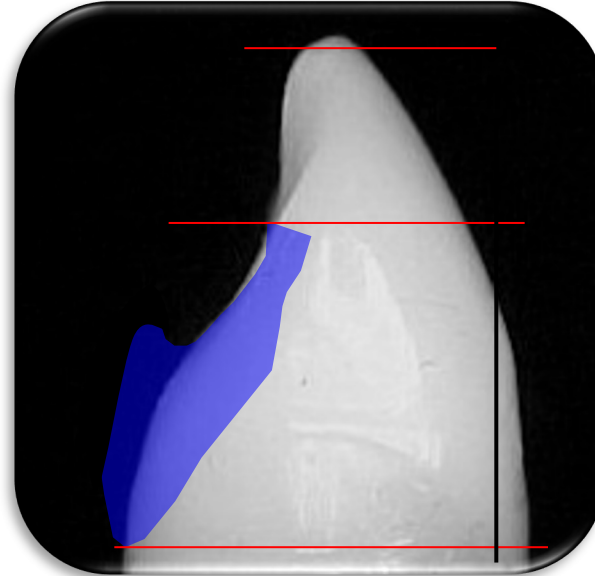
Lingual or Cingulum Rest and Rest Seat

Lingual rest seat in composite



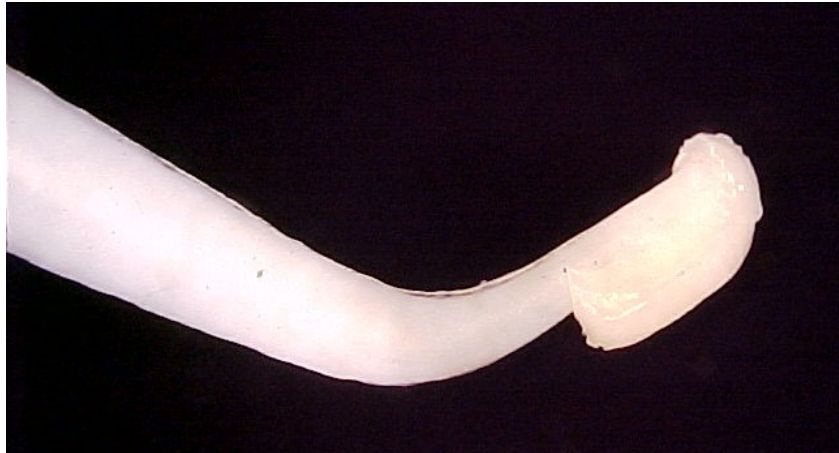
Lingual or Cingulum Rest and Rest Seat

Lingual rest seat in composite

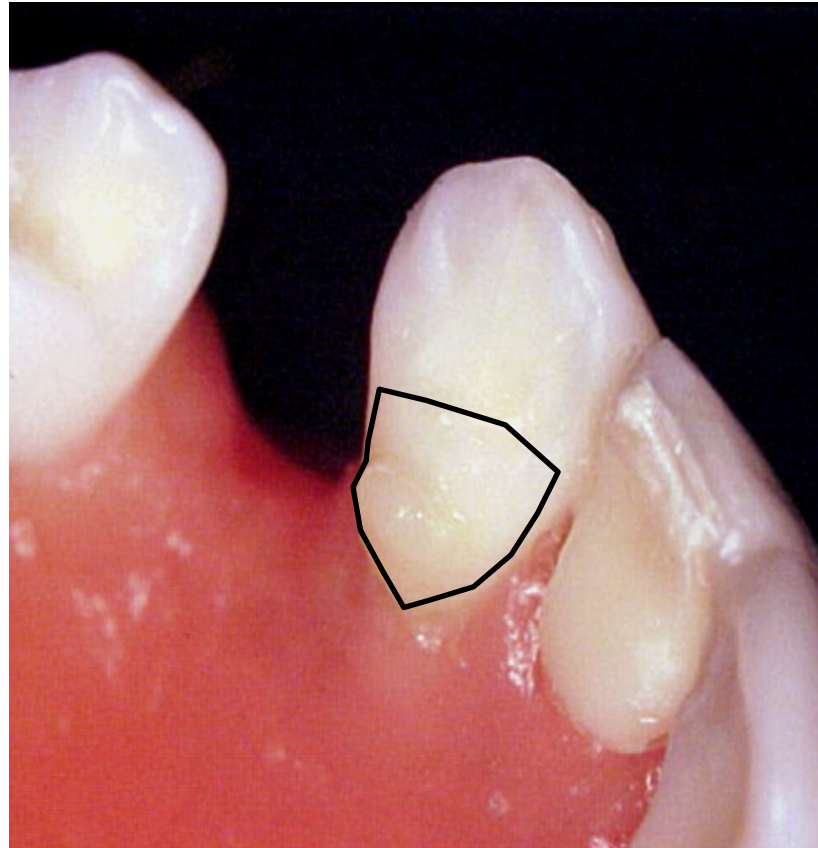


Lingual or Cingulum Rest and Rest Seat

Lingual rest seat in composite



One single increment
Sculpture



Lingual or Cingulum Rest and Rest Seat

Multiple incisors should receive lingual rest to distribute the stress over a number of teeth



Types of Rest and Rest Seat

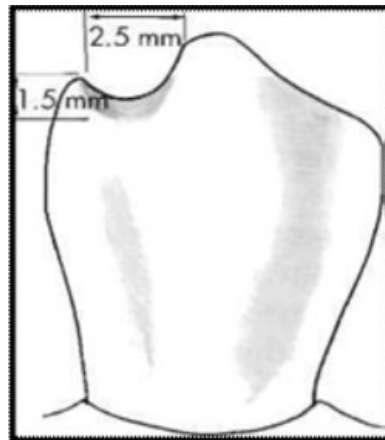
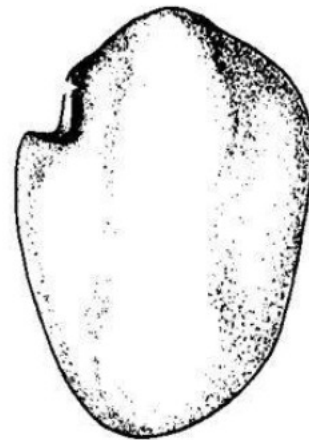
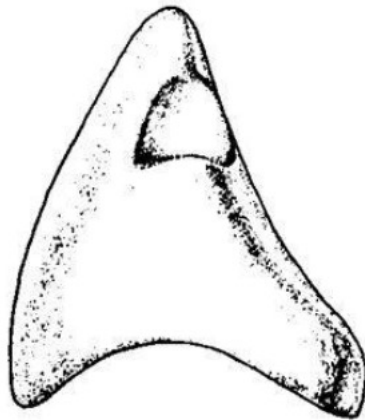
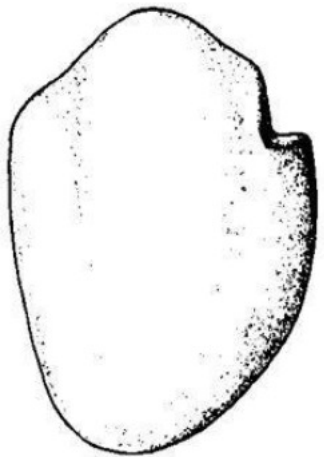


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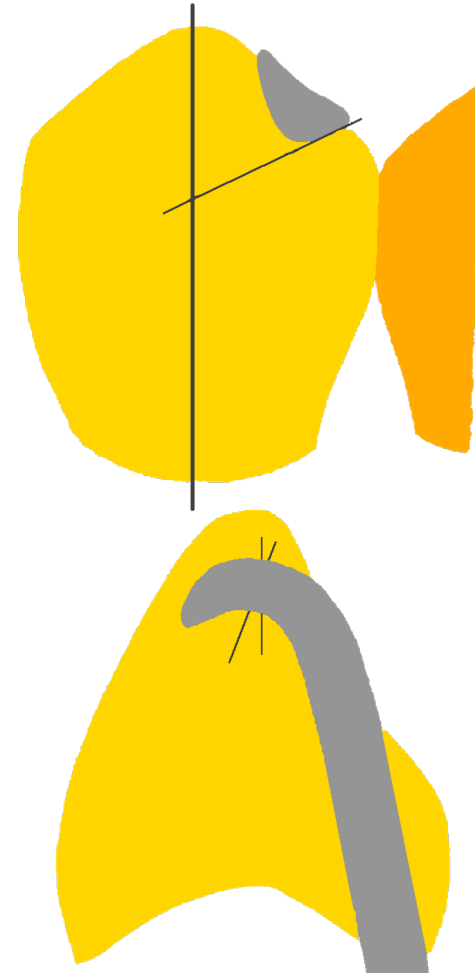
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Incisal Rest and Rest Seat



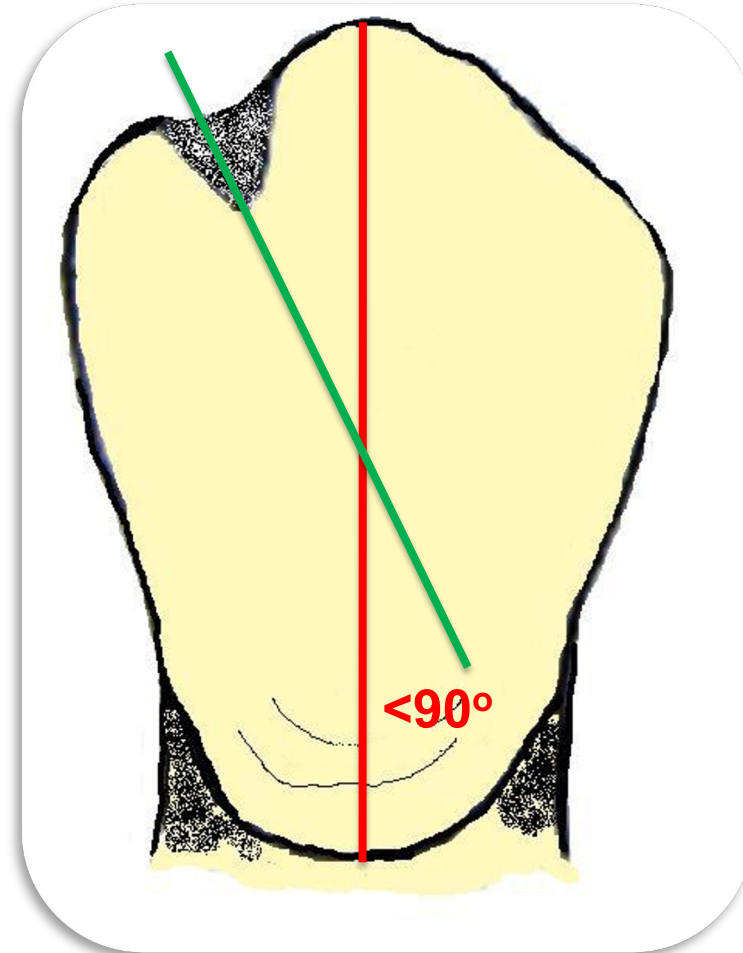
Incisal Rest and Rest Seat

- Concave M/D
- Convex B/L



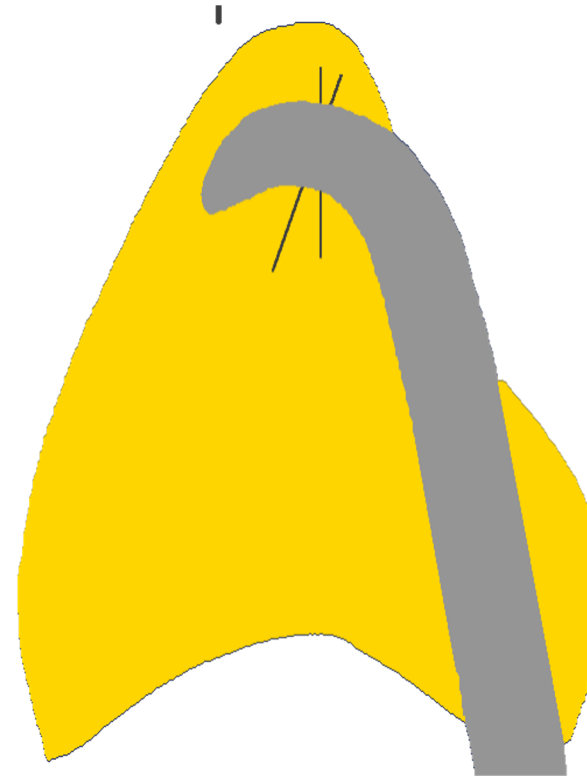
Incisal Rest and Rest Seat

- Concave M/D
- Convex B/L
- Floor less than 90°



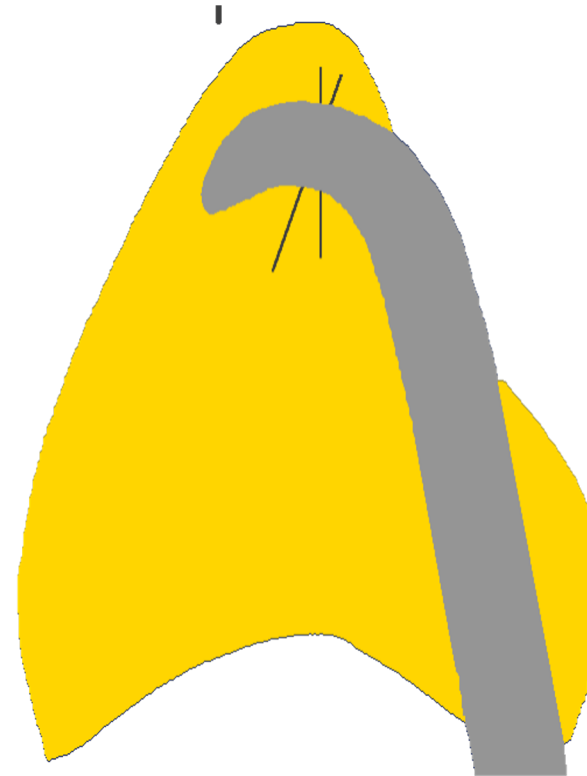
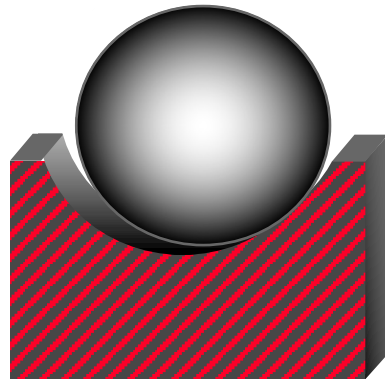
Incisal Rest and Rest Seat

- Concave M/D
- Convex B/L
- Floor less than 90°
- From L to B



Incisal Rest and Rest Seat

- Concave M/D
- Convex B/L
- Floor less than 90°
- From L to B
- Rounded, no sharp angles

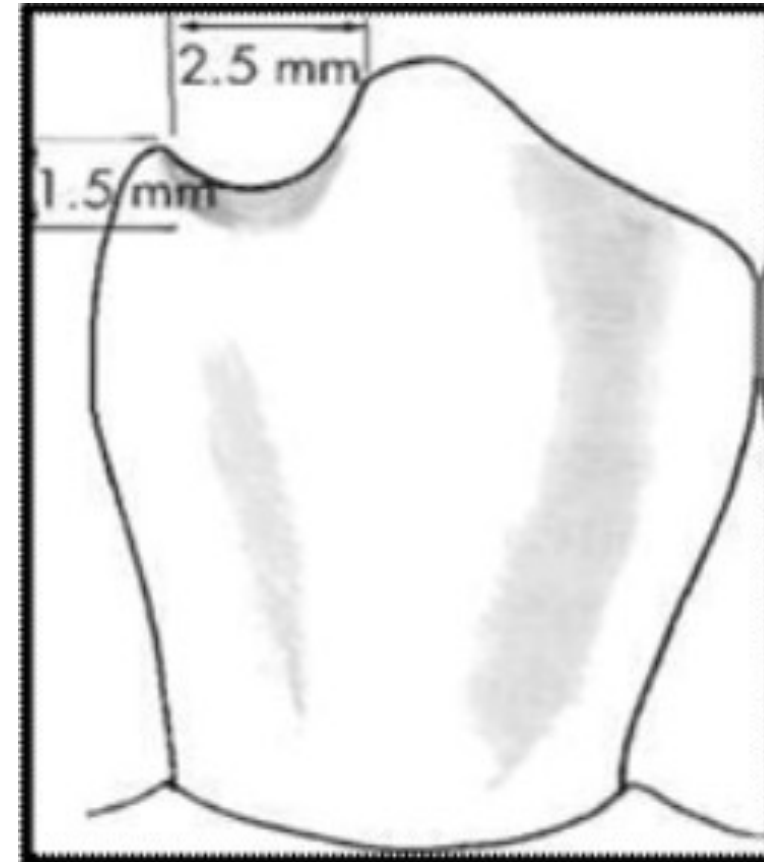


Incisal Rest and Rest Seat

- Concave M/D
- Convex B/L
- Floor less than 90°
- From L to B
- Rounded, no sharp angles
- 2.5 mm wide and 1.5 mm deep



Diamond tapered bur



Incisal Rest and Rest Seat

Lingual rest > Incisal rest

Indication:

- Occlusal interference of lingual rest

Disadvantages:

- Aesthetic



Incisal Rest and Rest Seat

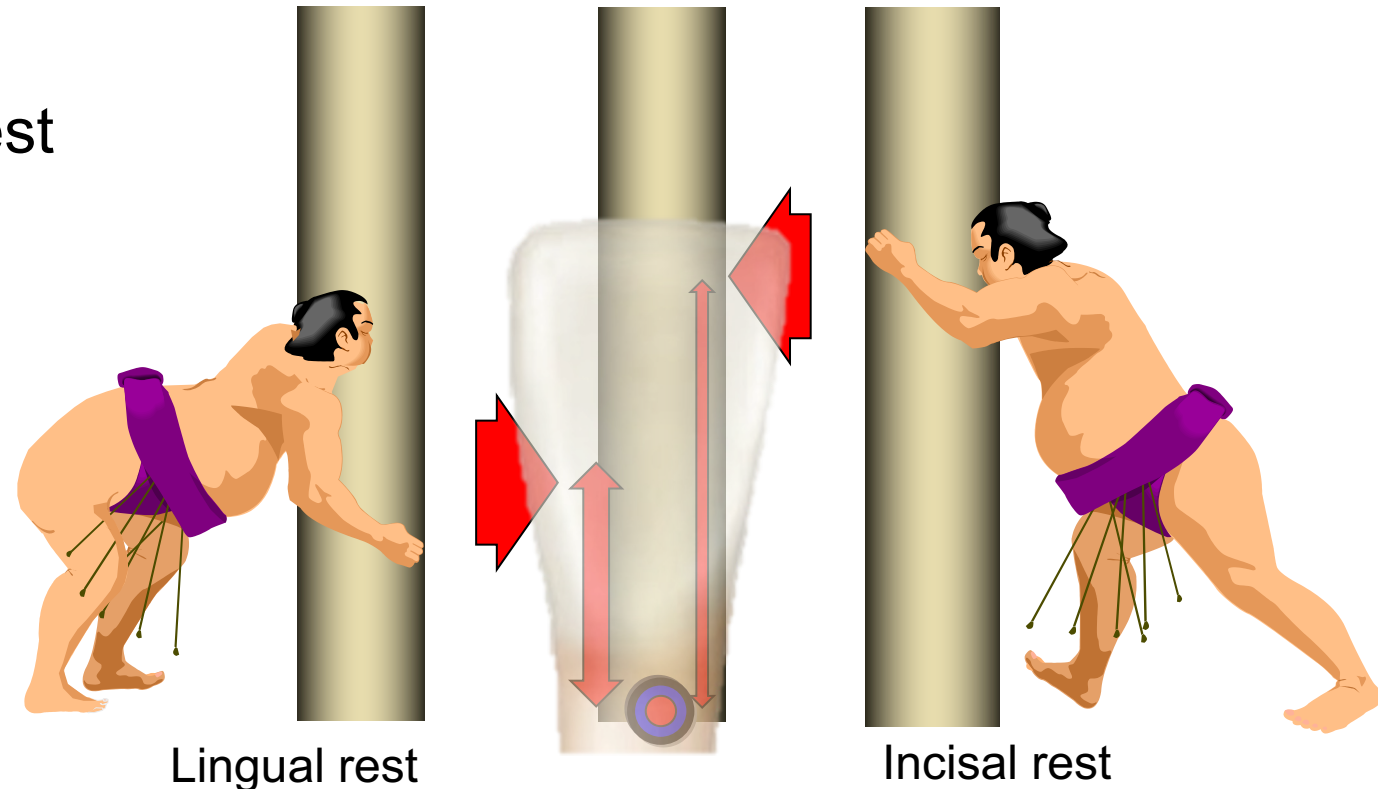
Lingual rest > Incisal rest

Indication:

- Occlusal interference of lingual rest

Disadvantages:

- Aesthetic
- Unfavorable Biomechanics



Incisal Rest and Rest Seat

Lingual rest > Incisal rest

Indication:

- Occlusal interference of lingual rest

Disadvantages:

- Aesthetic
- Biomechanical is not favorable
- Occlusal interference



Function: Direct and Indirect retention

Direct or Primary or Principal Rest

- Adjacent or near the edentulous area
- Part of the retentive clasp

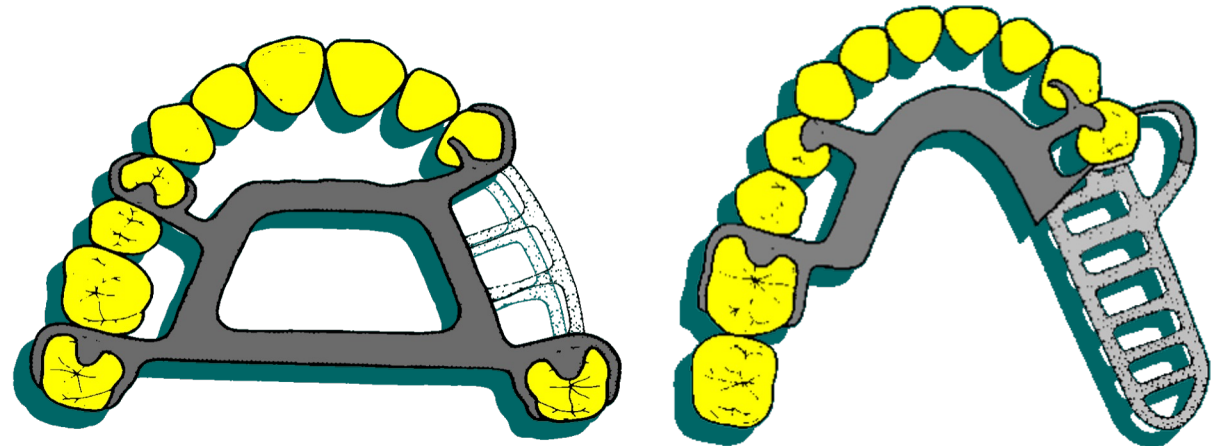
Function: Direct and Indirect retention

Direct or Primary or Principal Rest

- Adjacent or near the edentulous area
- Part of the retentive clasp

Indirect or Secondary or Auxiliary Rest

- Part of a clasp or just the rest



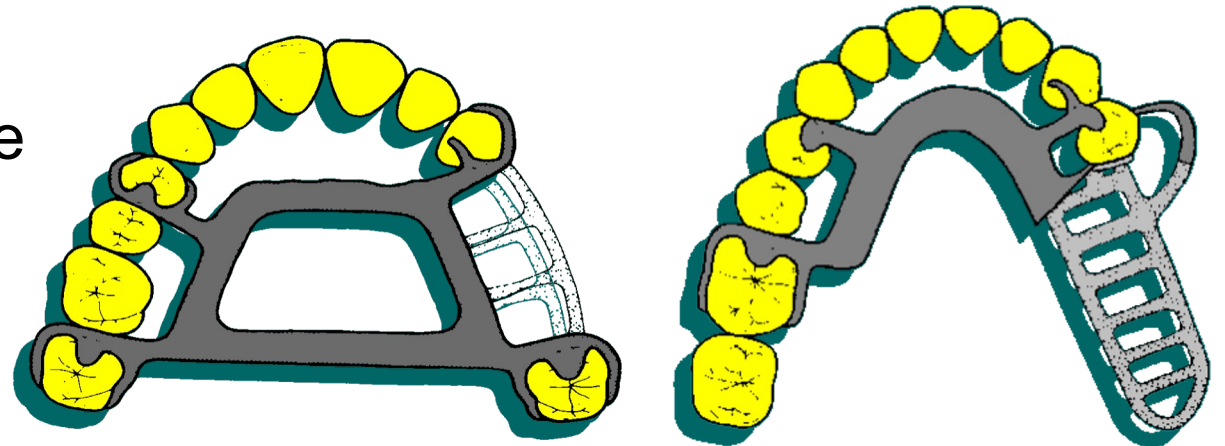
Function: Direct and Indirect retention

Direct or Primary or Principal Rest

- Adjacent or near the edentulous area
- Part of the retentive clasp

Indirect or Secondary or Auxiliary Rest

- Part of a clasp or just the rest
- Prevent the rotation of the denture
- Distant from the fulcrum line



Rest and Rest Seat

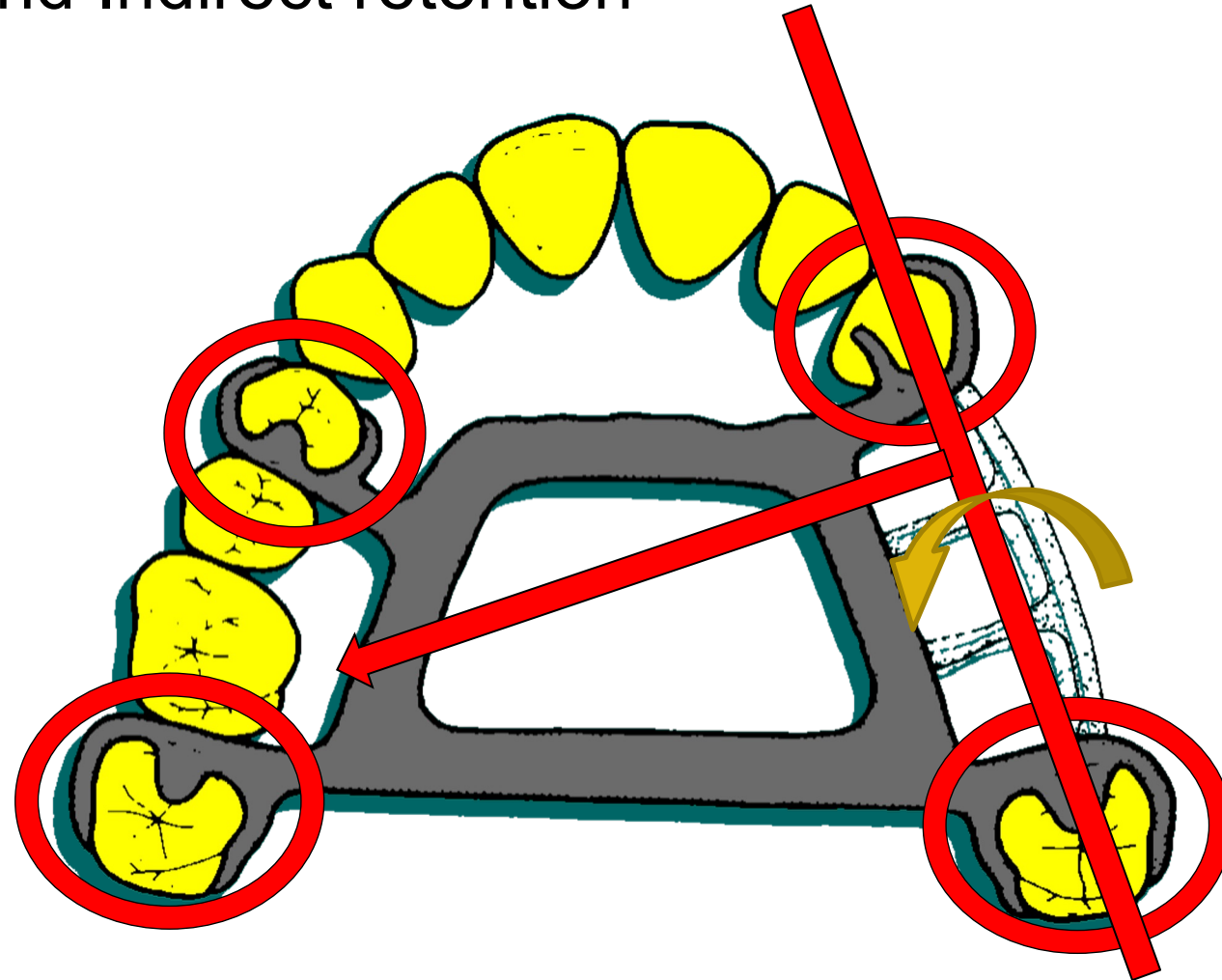


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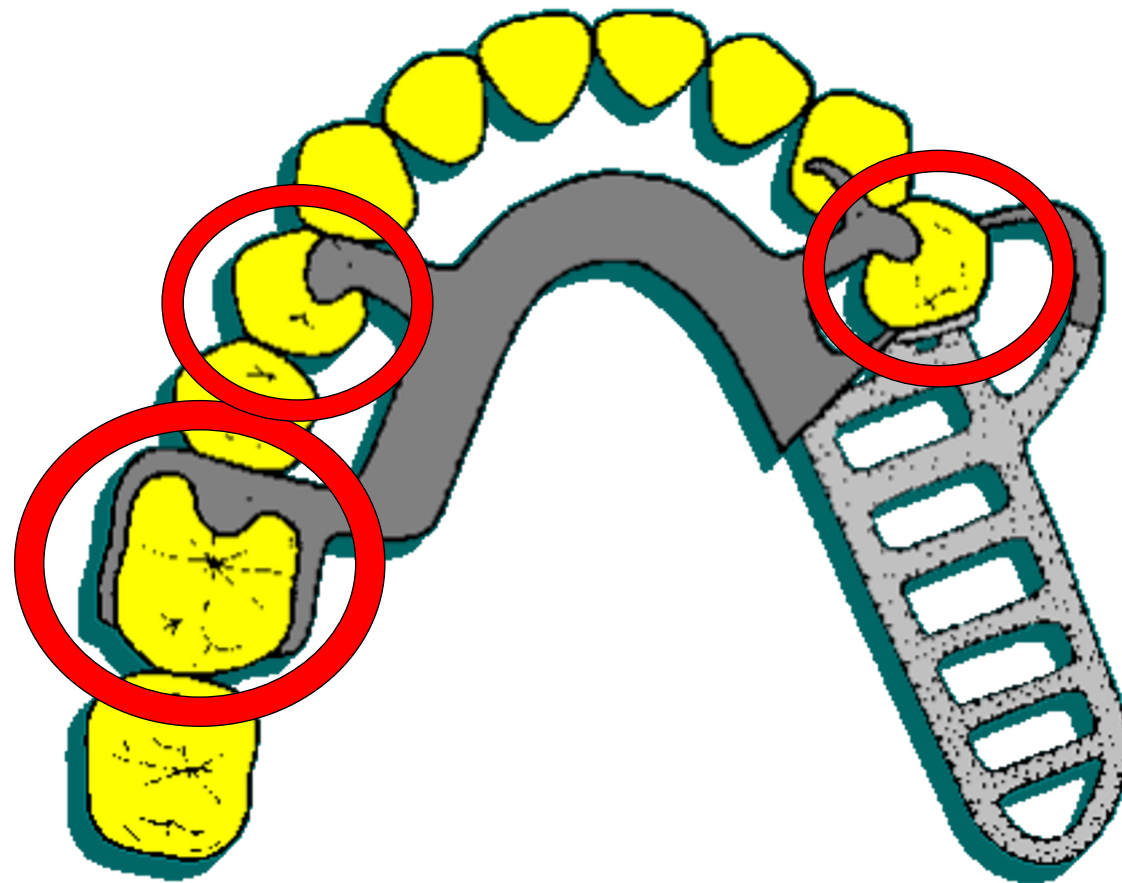
Function: Direct and Indirect retention



Rest and Rest Seat



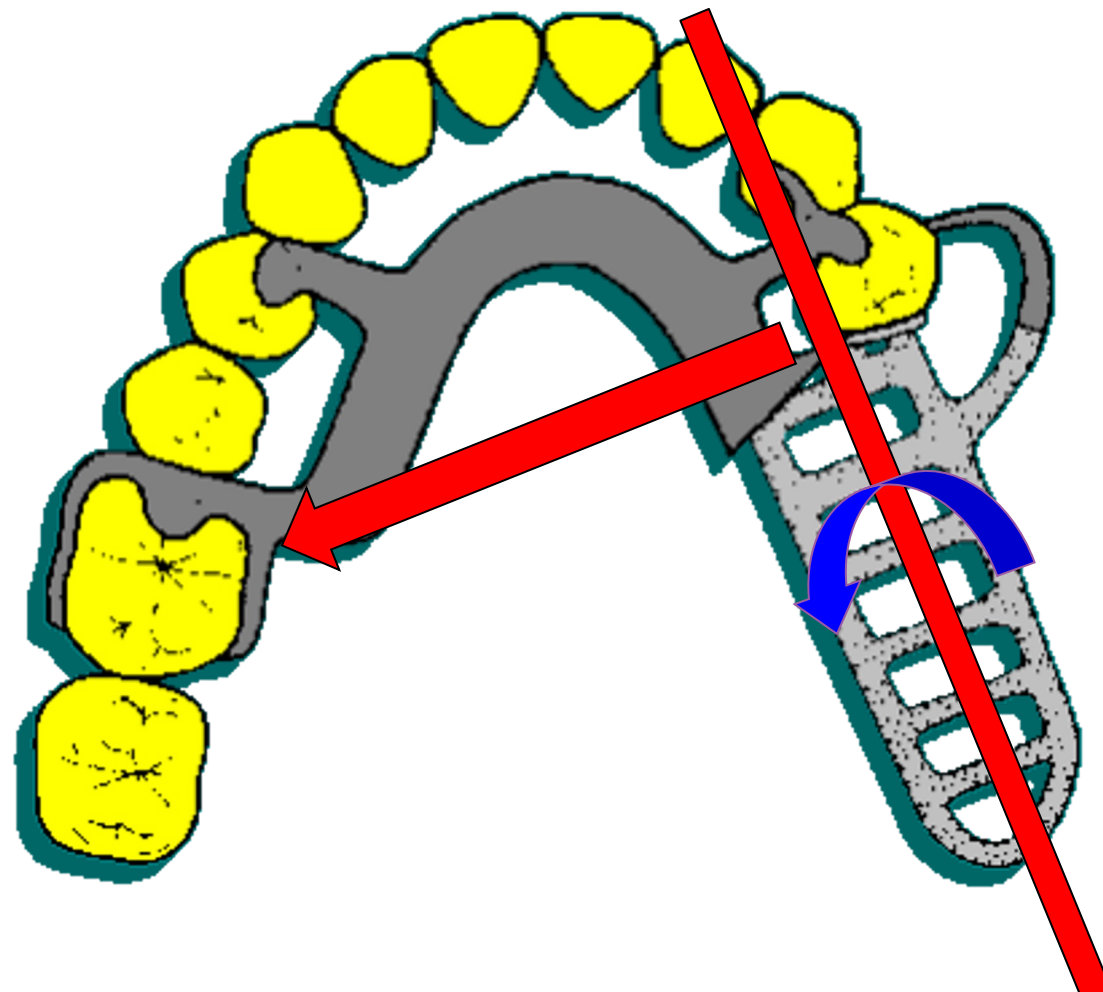
Function: Direct and Indirect retention



Rest and Rest Seat

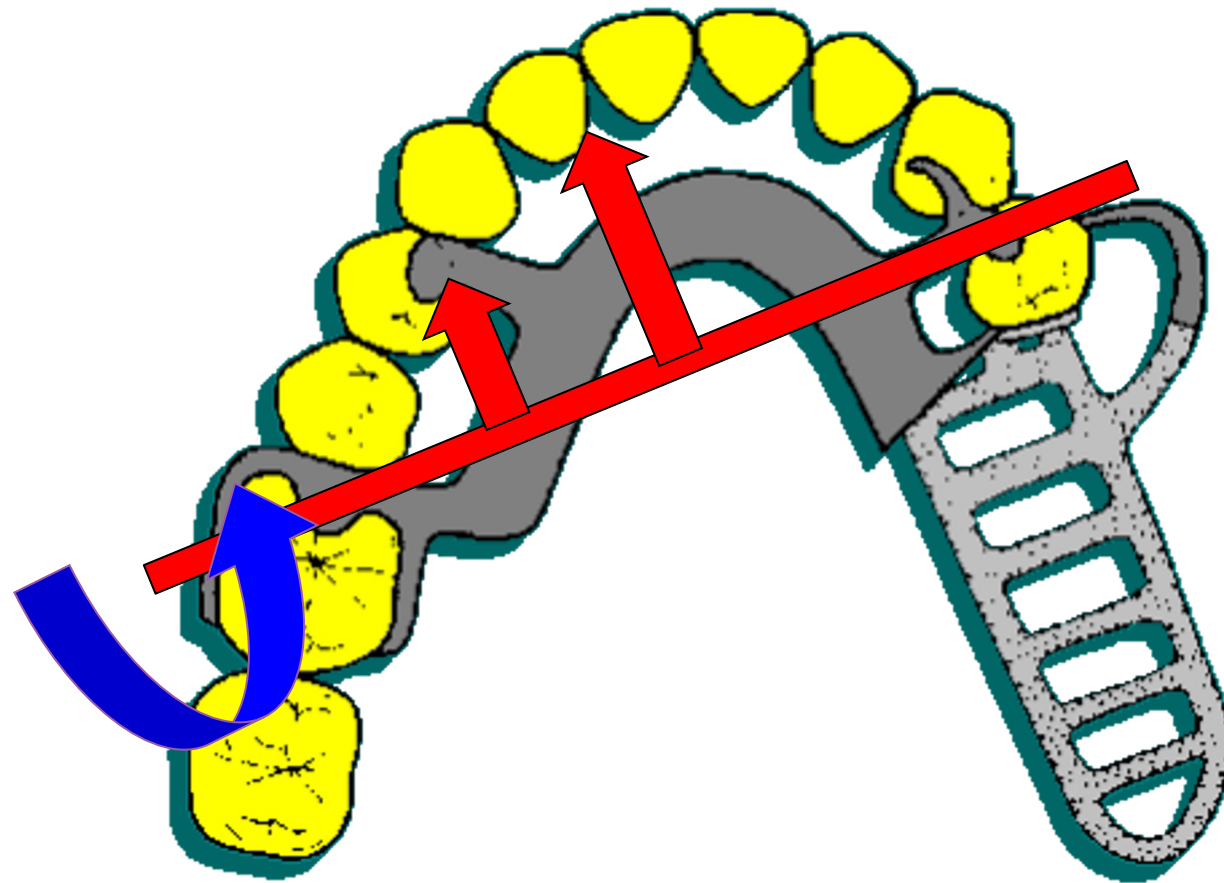


Function: Direct and Indirect retention



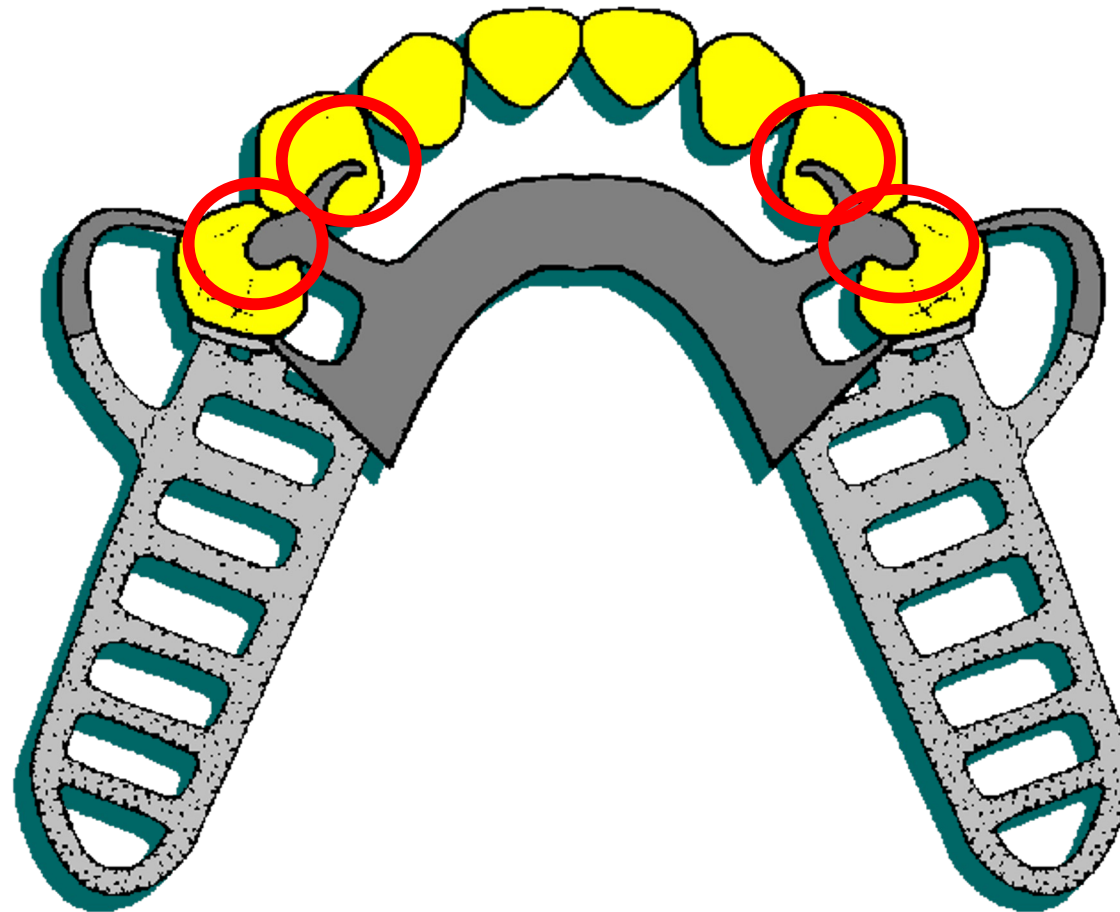
Rest and Rest Seat

Function: Direct and Indirect retention



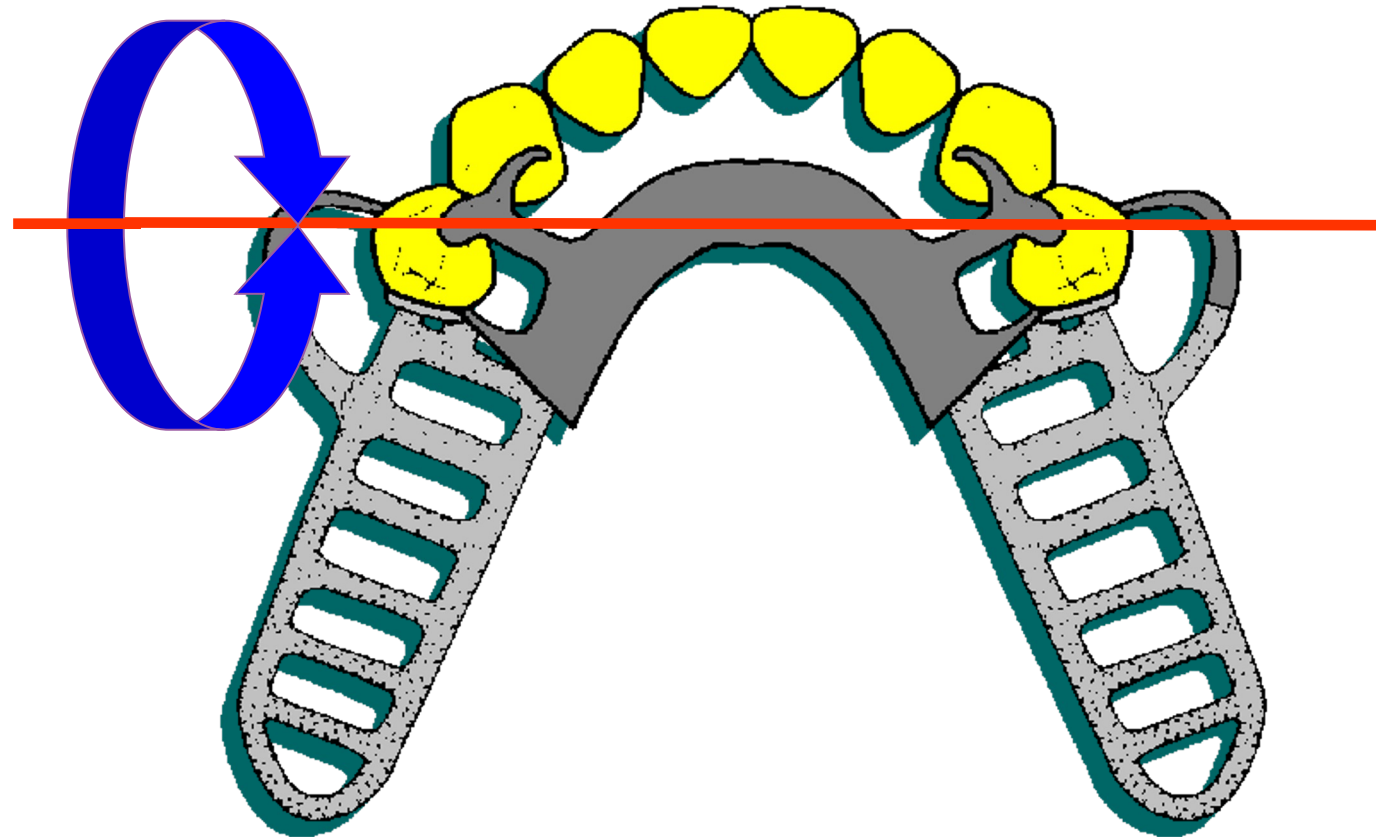
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Function: Direct and Indirect retention



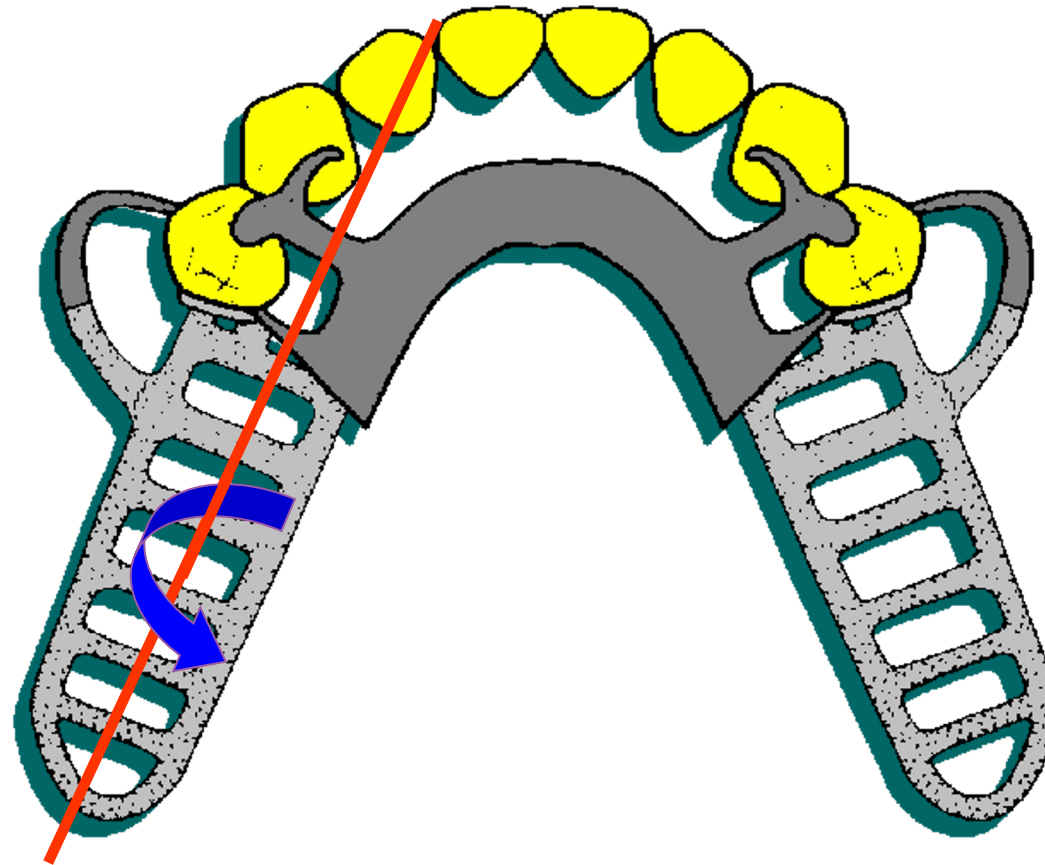
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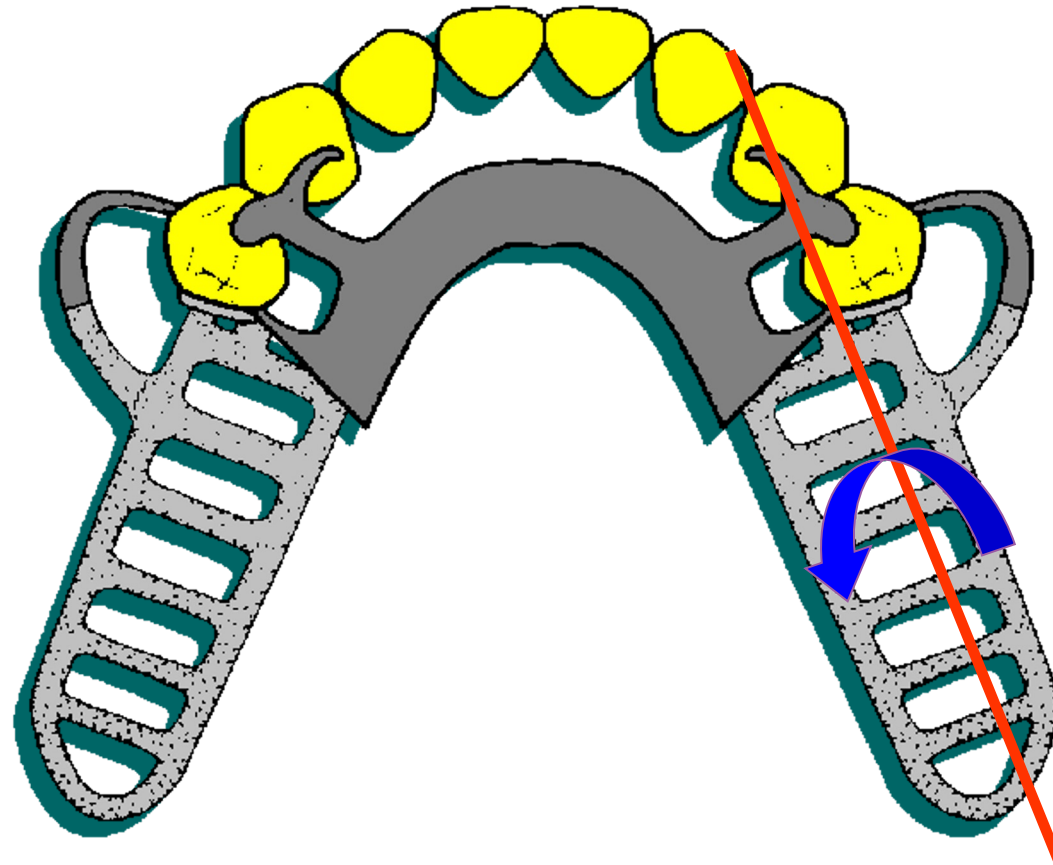
Rest and Rest Seat

Function: Direct and Indirect retention



Rest and Rest Seat

Function: Direct and Indirect retention



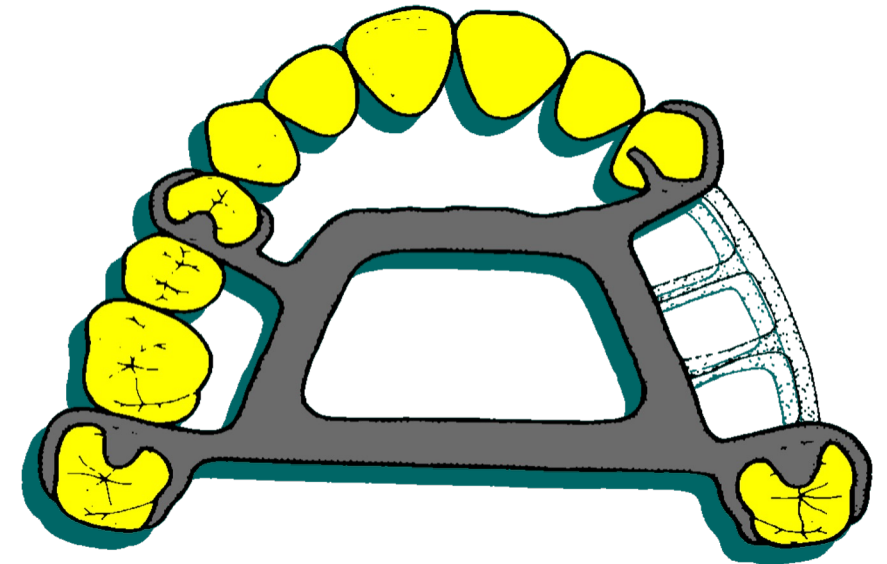
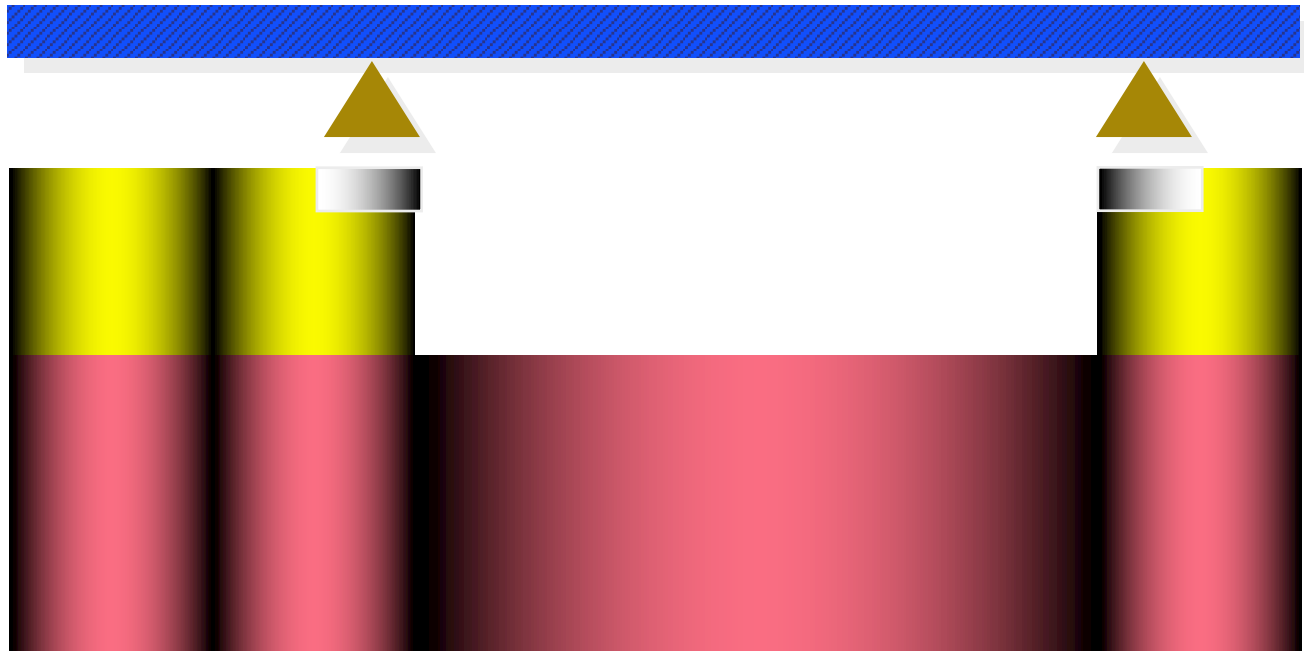
Rest and Rest Seat



Rest Distribution

Intercalated edentulous area

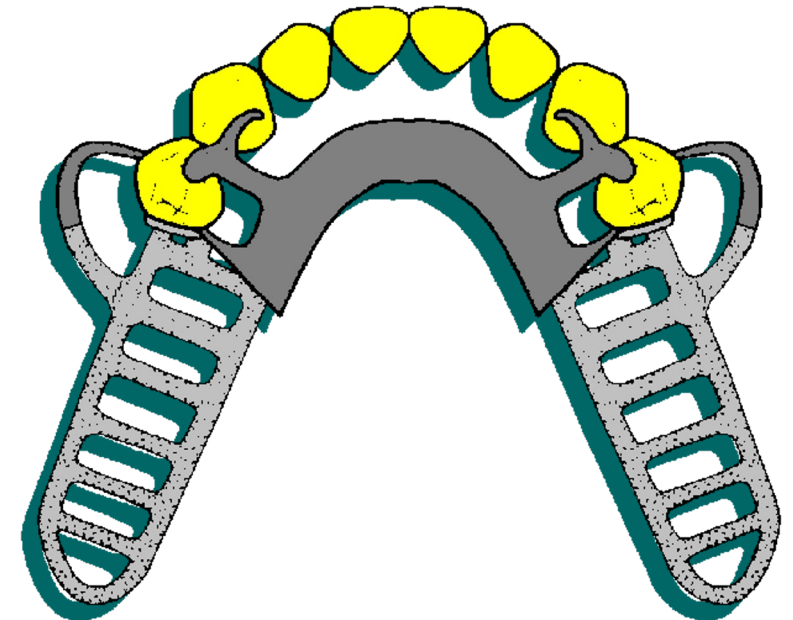
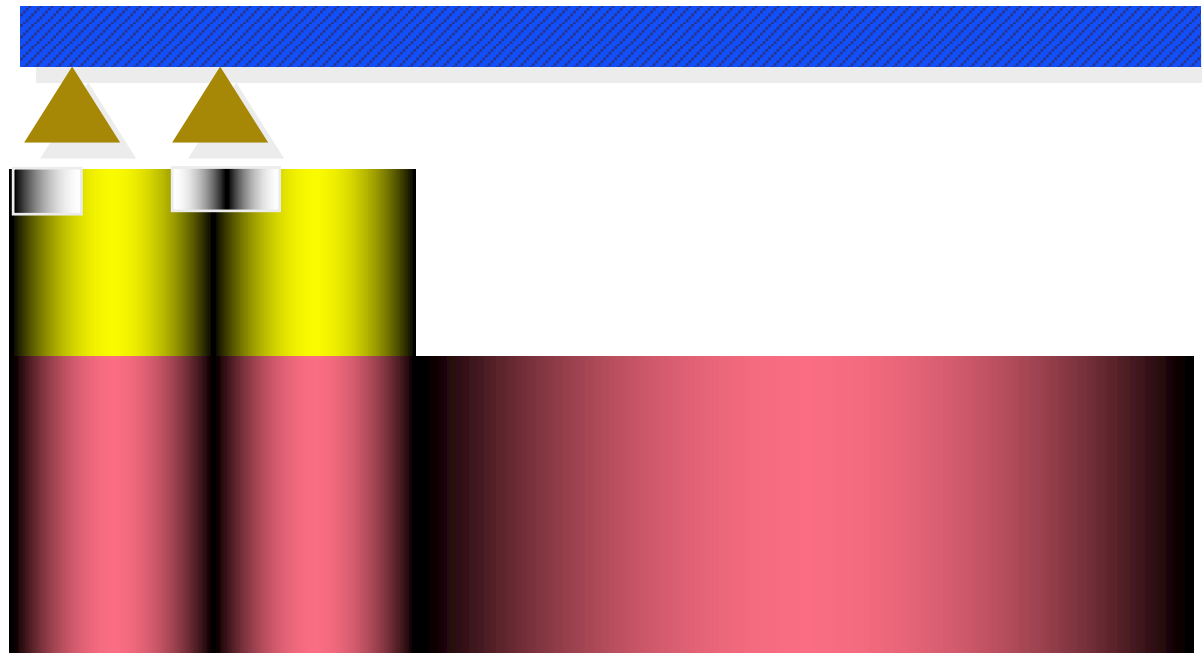
- Adjacent to the edentulous area



Rest Distribution

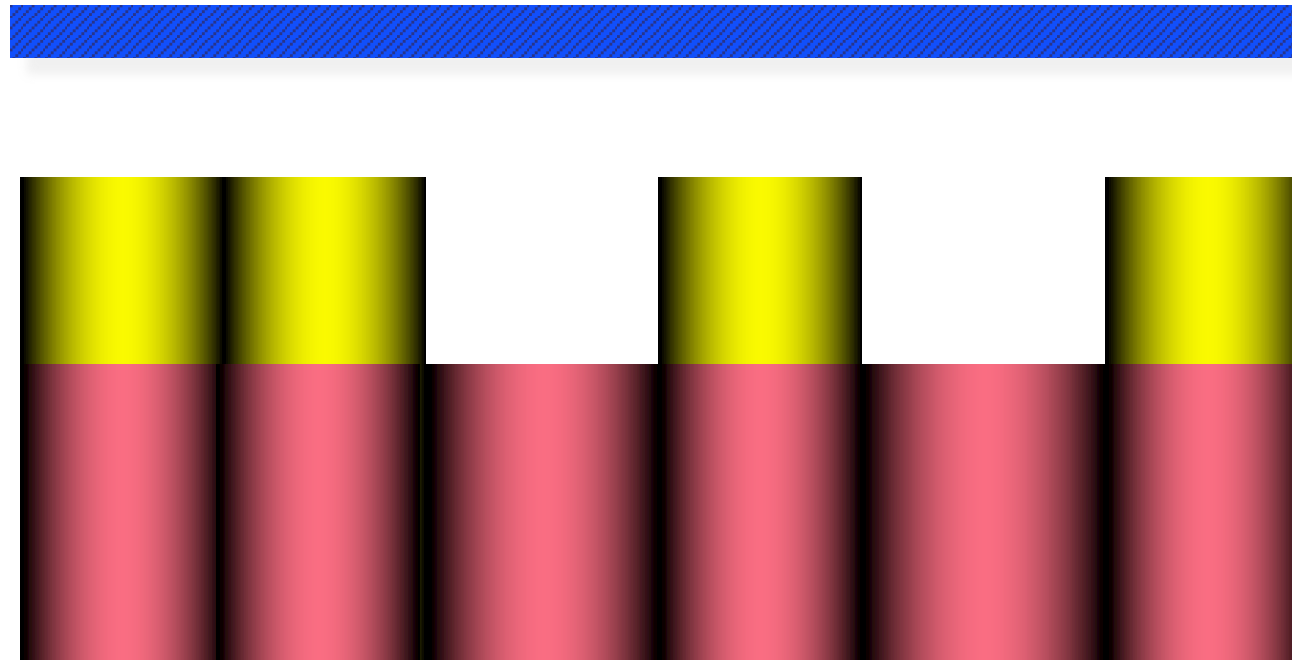
Free-end edentulous area

- Not immediately adjacent to the saddle.



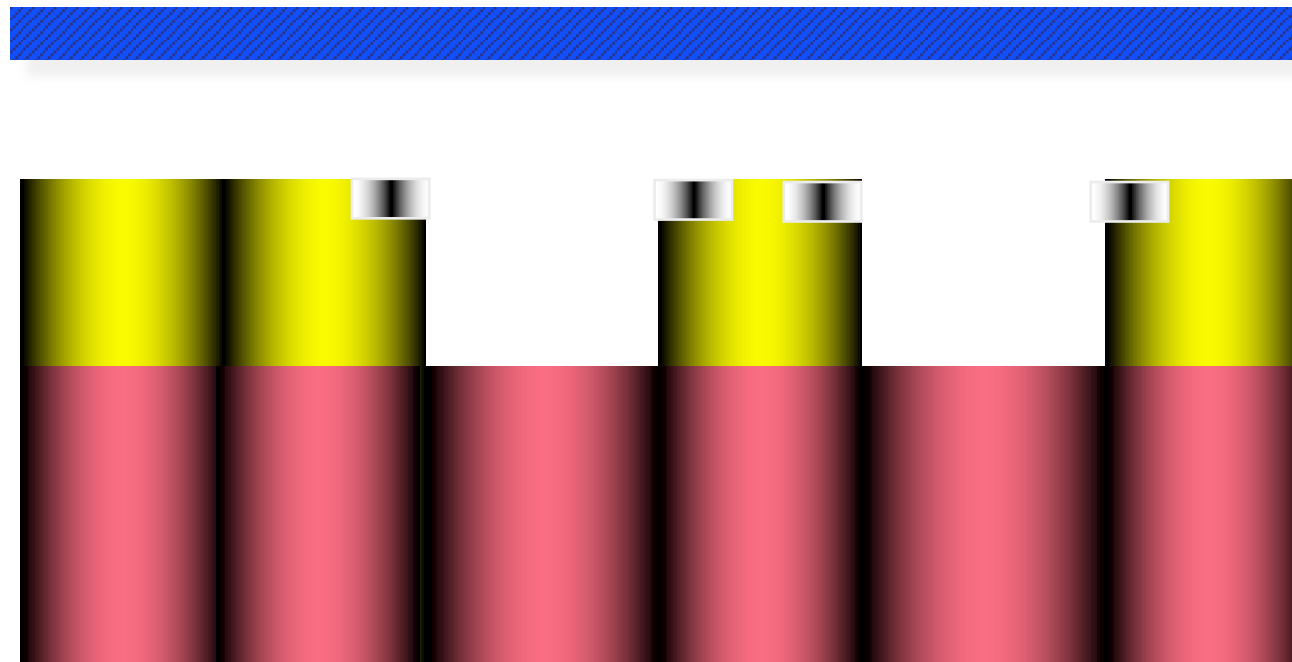
Rest and Rest Seat

Rest Distribution



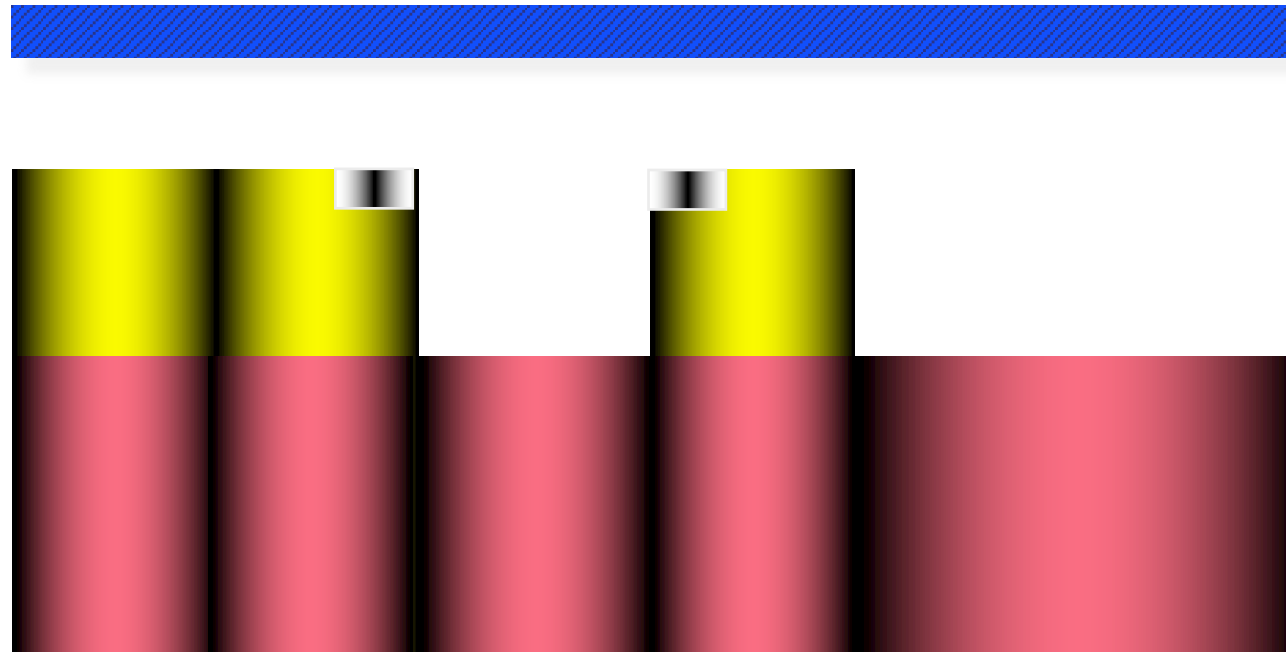
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Rest Distribution



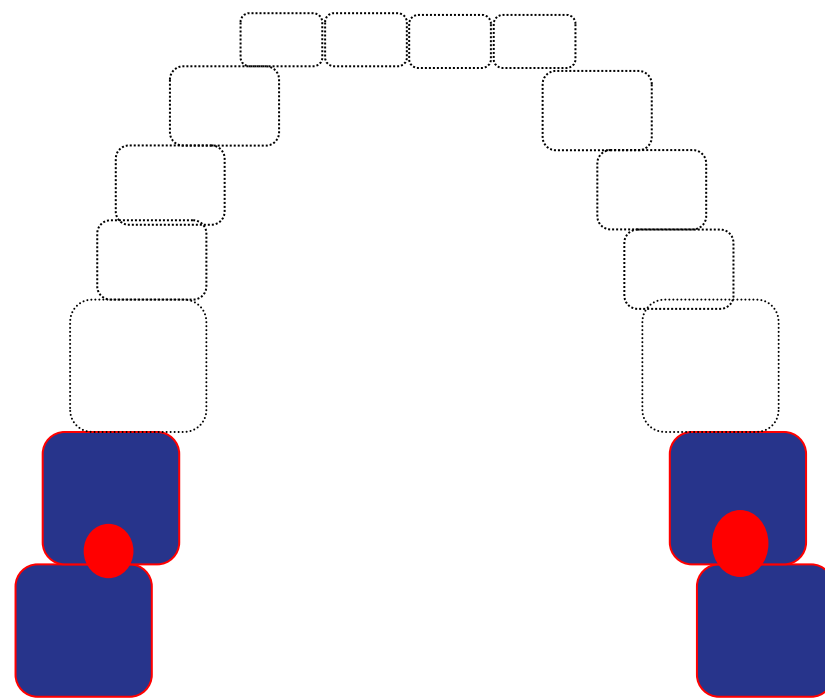
Rest and Rest Seat

Rest Distribution



Rest and Rest Seat

Rest Distribution



Rest and Rest Seat



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Thank you