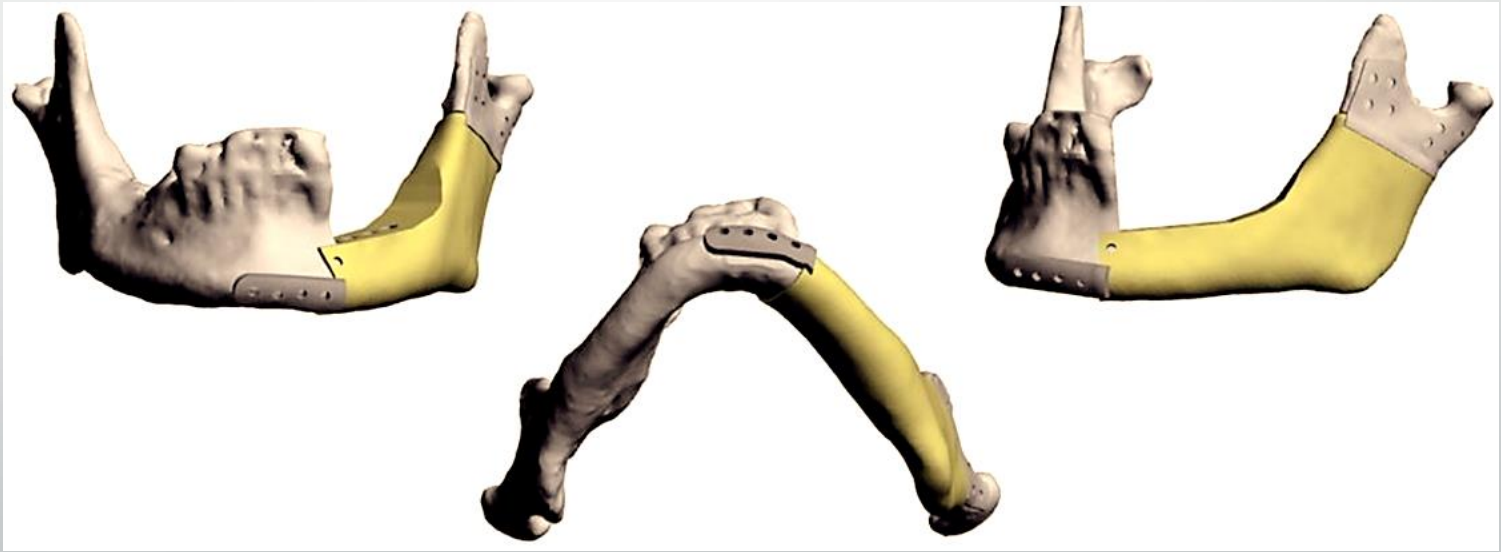
Removable Partial Denture Considerations in Mandibular Prosthetics

Removable Partial Denture Considerations in Mandibular Prosthetics

Mandibular resection results in defects that may preserve mandibular continuity or may result in discontinuity defects.



Removable Partial Denture Considerations in Mandibular Prosthetics

These are further subclassified by Cantor and Curtis:

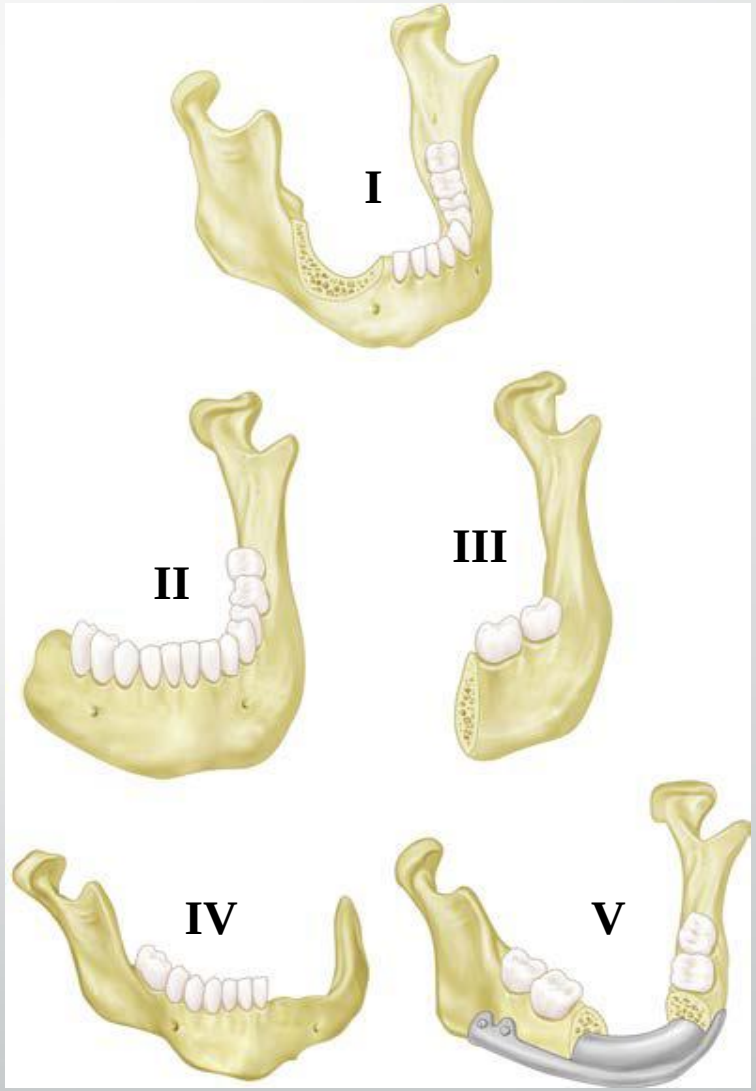
Class I: radical alveolectomy with preservation of mandibular continuity.

Class II: lateral resection of the mandible distal to the cuspid.

Class III: lateral resection of the mandible to the midline.

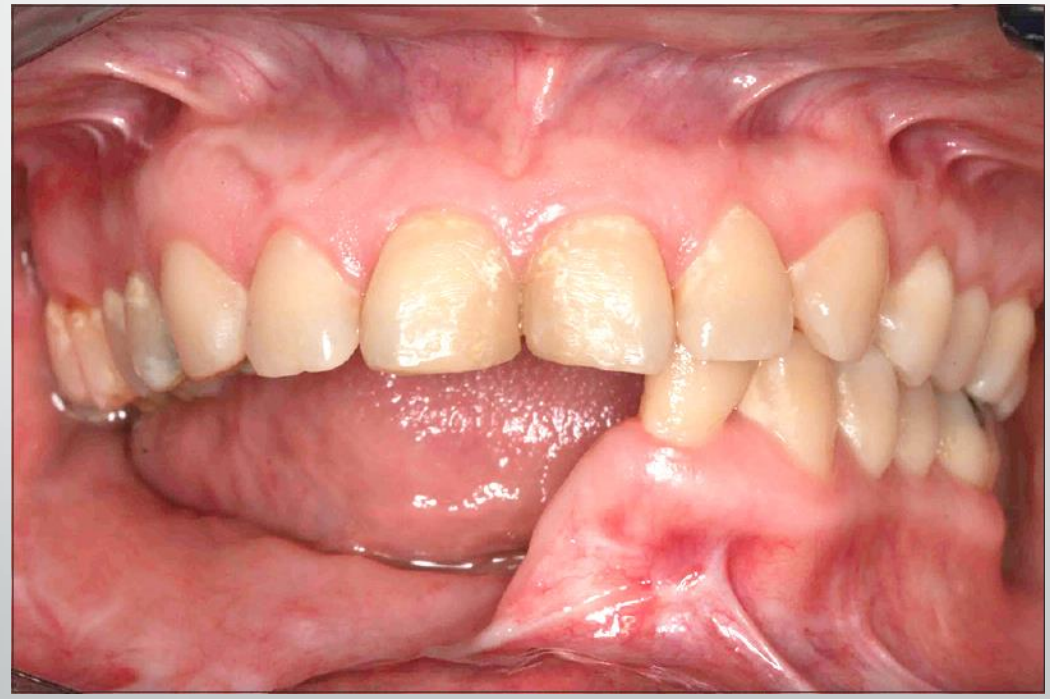
Class IV: Lateral bone and split-thickness skin graft.

Class V: Anterior bone and split-thickness skin graft.



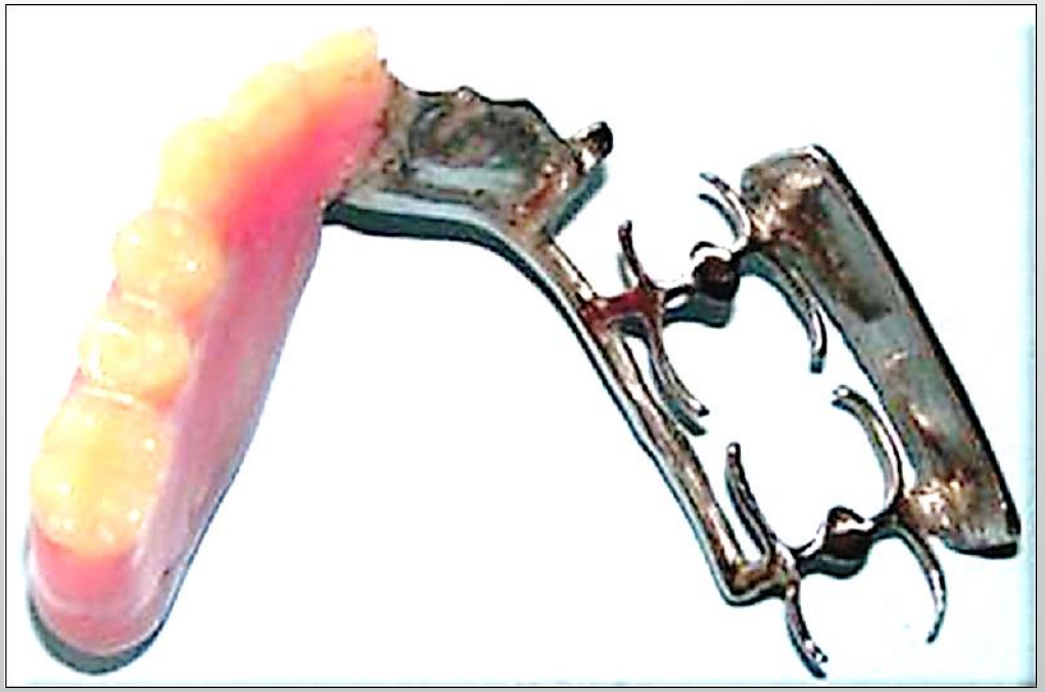
Removable Partial Denture Considerations in Mandibular Prosthetics

Resection prostheses are those prostheses provided to patients who have acquired mandibular defects that result in loss of teeth and significant portions of the mandible.



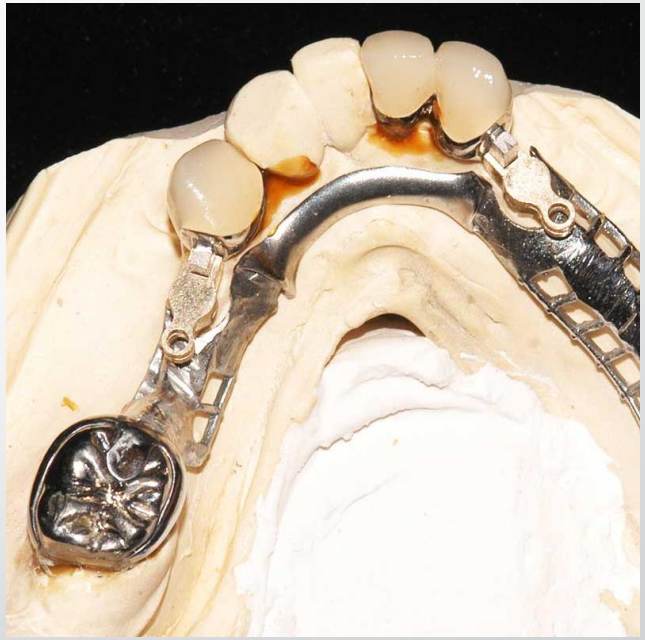
Removable Partial Denture Considerations in Mandibular Prosthetics

All framework designs should be dictated by basic prosthodontic principles of design.



Removable Partial Denture Considerations in Mandibular Prosthetics

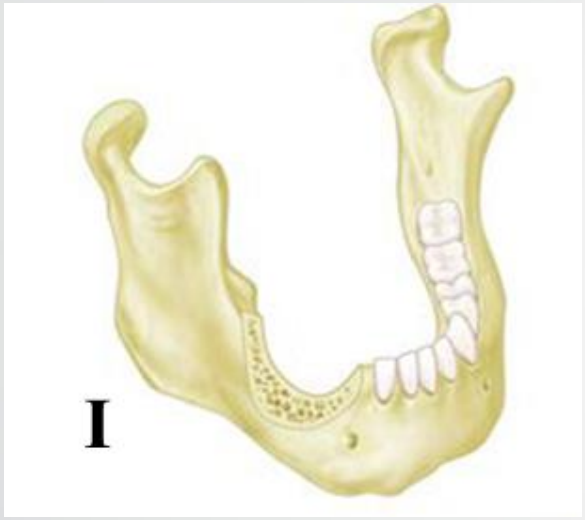
These include broad stress distribution, cross-arch stabilization with use of a rigid major connector, stabilizing and retaining components at locations within the arch to best minimize dislodging functional forces, and replacement tooth positions that optimize prosthesis stability and functional needs.

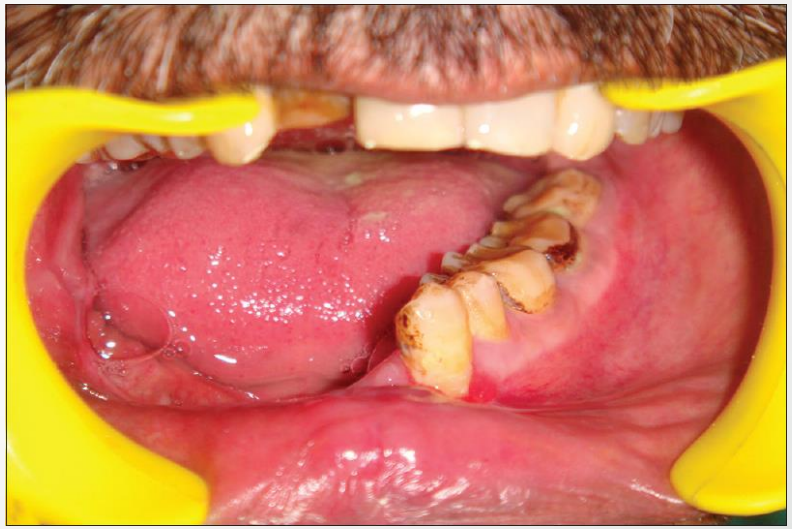


Removable Partial Denture Considerations in Mandibular Prosthetics

Modifications to these principles are determined on an individual basis and are greatly influenced by unique residual tissue characteristics and mandibular movement dynamics.

Type I Resection

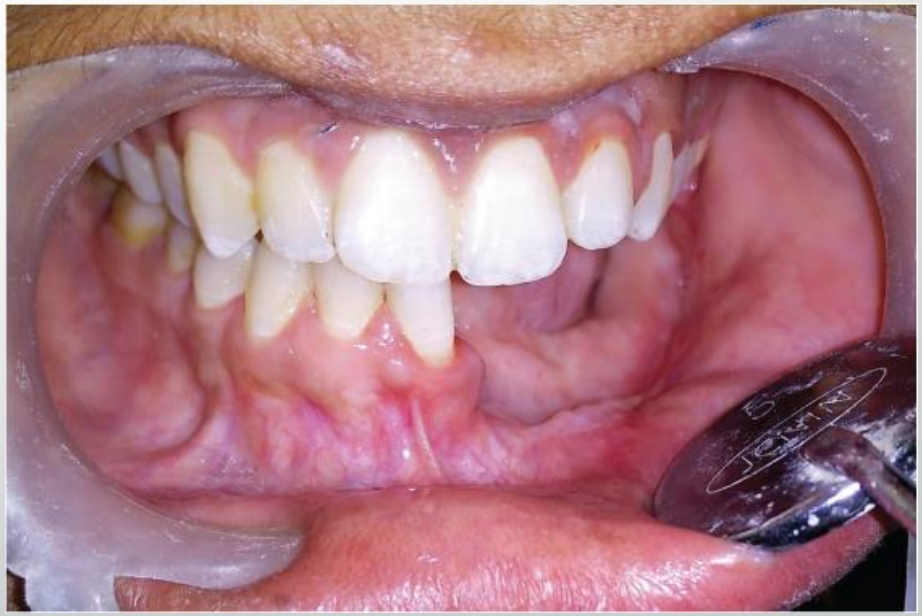




In a type I resection of the mandible, the inferior border is intact with normal movements. The major difference between this situation and a typical edentulous span is the nature of the soft tissue foundation.

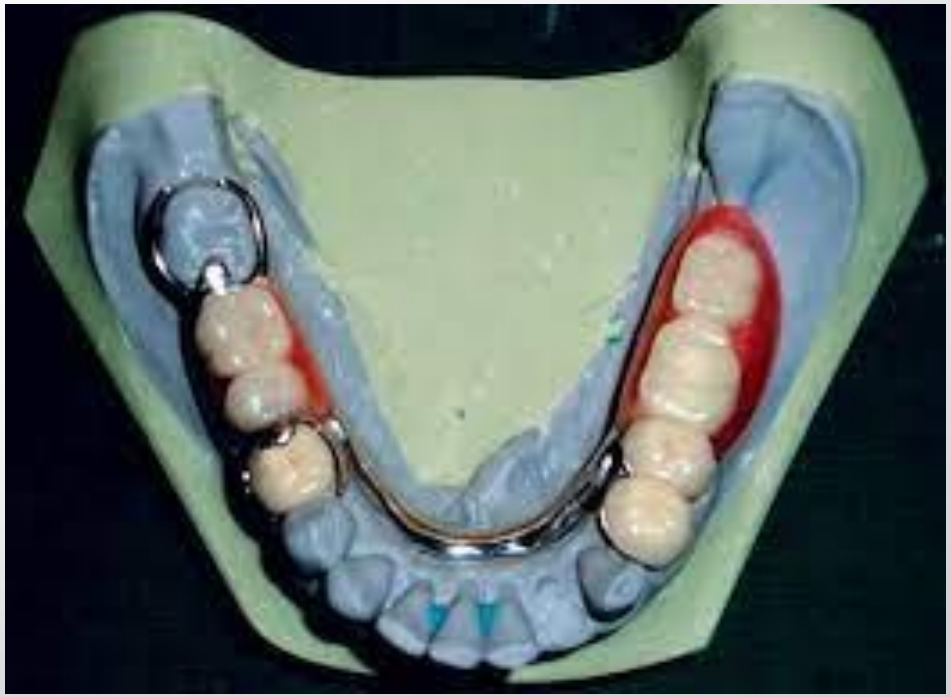
Type I Resection

The denture-bearing area may be compromised by closure of the defect with the use of adjacent lining mucosa (which can reduce the bucco-lingual width), or by the presence of a split-thickness skin graft.



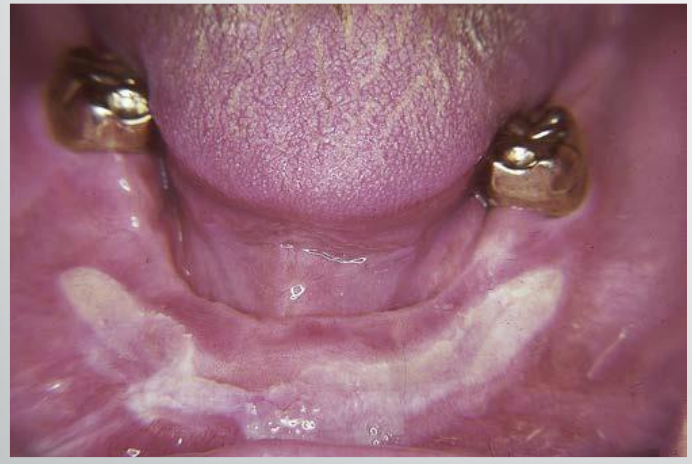
Type I Resection

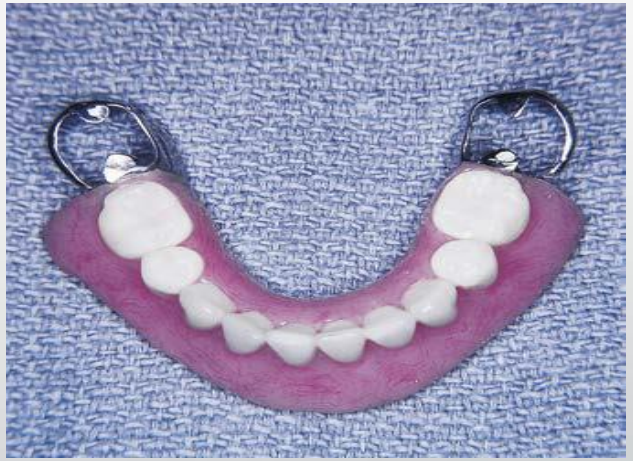
If the defect is unilateral and posterior, the framework would be typical of a Kennedy Class II design, taking into account whatever modification spaces may be present.

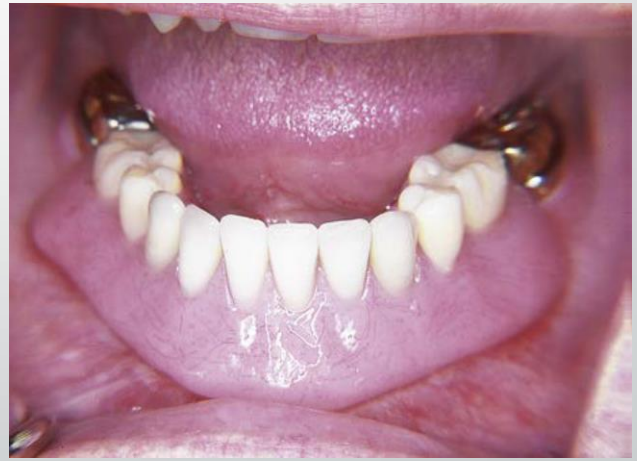


Type I Resection

When the marginal resection is in the anterior area, the design may be more typical of a Kennedy Class IV design.







Type I Resection

Anterior marginal resections sometimes include part of the anterior tongue and floor of the mouth. With loss of normal tongue function, the remaining teeth are no longer retained in a neutral zone, and as a result, they often collapse lingually because of lip pressure. If this occurs, the use of a labial bar major connector may be necessary.