

Maxillary Major Connectors

Six basic types of maxillary major connectors are considered:

1. Single palatal strap
2. Combination anterior and posterior palatal strap-type connector
3. Palatal plate-type connector
4. U-shaped palatal connector
5. Single palatal bar
6. Anterior-posterior palatal bars

. Single palatal strap

Bilateral tooth-supported prostheses, even those with short edentulous spaces, are effectively connected with a single, broad palatal strap connector, particularly when the edentulous areas are located posteriorly (Figure 1). Such a connector can be made rigid without objectionable bulk and interference with the tongue,



(Fig. 1) single palatal strap



Indications

Posterior bilateral edentulous spaces of short span in a tooth-supported restoration.

Contra indication: in tooth tissue support PD, (CL I, CL II).

Characteristics and Location

- (1) Anatomic replica form.
- (2) Anterior border follows the valleys between rugae as nearly as possible at right angles to median suture line.
- (3) Strap should be 8 mm wide or approximately as wide as the combined width of a maxillary premolar and first molar. .
- (4) Confined within an area bounded by the four principal rests.

Combination Anterior and Posterior Palatal

Strap–type Connector

Structurally, this is a rigid palatal major connector. The anterior and posterior palatal strap combination may be used in almost any maxillary partial denture design.

Characteristic and location:

1. Anatomic replica form.
2. Should be flat and a minimum of 8 mm wide.
3. Posterior palatal connectors should be located as far posterior as possible to avoid interference with the tongue but anterior to the line of flexure formed by the junction of the hard and soft palates.

4. Strong major connector design because, the anterior and posterior components are joined together by longitudinal connectors on either side, which form a square or rectangular frame.
5. All major connectors should cross the midline at a right angle.
6. Lateral palatal straps should be of minimum 6 mm from gingival crevices of remaining teeth.

Indications

- (1) In Class I and II arches in which excellent abutment and residual ridge support exists, and direct retention can be made adequate without the need for indirect retention from palate (palatal plate).
- (2) Long edentulous spans in Class II mod. 1 arches.
- (3) In Class IV arches in which anterior teeth must be replaced with a removable partial denture.
- (4) Inoperable palatal tori that do not extend posteriorly to the junction of the hard and soft palates.

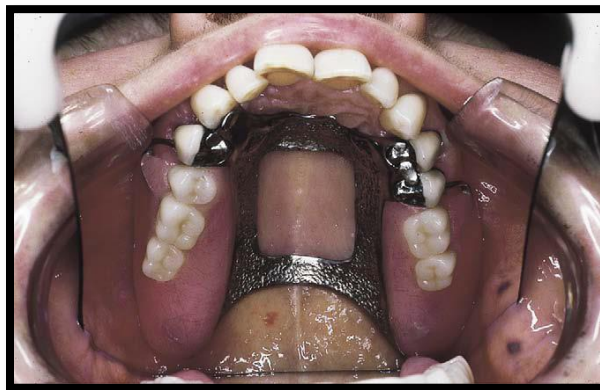


Fig. 2 Antero-posterior palatal strap

PALATAL PLATE CONNECTOR:

palatal plate are used to designate any thin, broad, contoured palatal coverage used as a maxillary major connector and covering one half or more of the hard palate (fig. 4).

The anatomic replica palatal major connector has several potential advantages:

1. It permits the making of a uniformly thin metal plate that reproduces the anatomic contours of the patient's own palate. Its uniform thinness and the thermal conductivity of the metal are designed to make the palatal plate more readily acceptable to the tongue and underlying tissue.
2. The corrugation in the anatomic replica adds strength to the casting; thus a thinner casting with adequate rigidity can be made.
3. Surface irregularities are intentional rather than accidental; therefore electrolytic polishing is all that is needed.
- 4, intimate contact between metal and tissue provides the prosthesis with greater retention.



Fig.4 Palatal plate major connector

