Major CONNECTORS (maxillary)
What is major connector?

It is the component of R P D that connects the parts of the prosthesis located on one side of the arch with those on the opposite side.
Functions of connectors

1. *Join* the component parts of RPD together.
Functions of connectors

2. Contribute to the **support of** the prosthesis.
Functions of connectors

3. They may contribute to the functions of bracing and
4. **Contribute to retention of the prosthesis.** Palatal plates provide direct retention.
4. Connectors resting on prepared dental or firm oral tissues provide *indirect retention*. 
**Rigidity** is necessary to transmit stresses of mastication from one side of the arch to the other.
Must be properly located in relation to gingival and moving tissues and not interfere or irritate the tongue.
The borders should run parallel to the gingival margin.
3. Relief is avoided *under maxillary major connector*
It should cross the midline of the palate perpendicular to it
The borders should be beaded.

1. Seal along the border
2. Preventing food from collecting under the max max c and
3. Preventing over growth of the palatal tissues.
4. Transfers borders from master to refractory cast.
The Form Of Maxillary Major Connectors Maybe:

- **BARS**
  - 6–8mm
  - Cross section is half round

- **STRAPS**
  - 13–20mm
  - 0.6–0.8 mm thickness

- **PALATAL PLATES**
  - Covers more than half of the palate
Bar maxillary connector

- Anterior palatal bar
**Bar maxillary connector**

**Indications:** In short bounded saddle

It cannot be used in cases having *ltorus palatinus* or prominent *median palatine raphe*
Bar maxillary connector

- **Location and form** in close relation to the junction of the hard and soft palate, or placed in level with the second molar.
- **Advantages**: exhibits limited coverage and well tolerated by the tongue. It is not likely to affect taste.
- **Indirect retainer in c IV**
**Location and form:** Anterior, Posterior bars and Longitudinal bars: the metal forming the connector lies **in two different directions** giving the connector **strength and rigidity**.
Bar maxillary connector

**Indication:** in any design especially in the presence of torus palatinus

**Advantages:** the most rigid bar major connector, minimal soft tissue coverage

**Disadvantages:** Poor support, annoy the tongue and are intolerable

**Contraindications:** high, narrow palatal vault.

large tori extending to the junction of the hard and soft palate
The lateral palatal borders should be placed at the junction of the vertical and horizontal surfaces of the palate.

Advantages of The Palatal strap

Because the palatal strap is located in two or more planes, it offers great resistance to bending and twisting forces. This theory is similar to the "L-beam" principle used in building construction. Simply stated, forces transmitted on different planes are counteracted more easily.

Inherently strong, it can be kept relatively thin. Since this configuration offers little interference with normal tongue action. The increased tissue coverage helps distribute applied stresses over a larger area.
Location and form: in the valleys rather than the crests of the rugae area.

Indications: a large torus or a hard prominent median palatine raphe exists.

Advantages: some vertical support. Indirect retention may be provided.

Disadvantages: a poor connector because it lacks the rigidity,
Advantages

- Rigid.
- Reduces gingival margin coverage to a minimum.
- Well tolerated.
- Away from the tactile receptors.
- Rarely annoying to the patient.
- Relatively narrow.
- Minimal interference with phonetics.
- The most versatile and widely used maxillary major connector.
Has a thicker central area for increased rigidity.
**Location and form:** a rigid connector; similar location and structure to that of the a p bar

**Indicated** in Kennedy class I or II partial denture bases, when a large torus exists.

**Advantages:** Rigidity and strength of the connector allow the metal to be used in thinner sections. Support due to wide palatal coverage. Good retention and stability.
Extended palatal plate

**indication:** Free end saddles with anterior modification spaces.

Only six anterior teeth remaining
CIII with modification with poor abutment

Provide **Direct – indirect Retention** (Full Palatal Coverage)
SEE YOU SOON