**Lec. 11 Prosthodontic dr.makarem**

 **Arrangement of anterior teeth**

Position of teeth: important role is to set the teeth in place where they grew.

Anterior teeth

1. Incisive papilla:
* Aid in determining the midline
* Labial surfaces of the central incisors are usually 8-10mm in front of the papilla (distance increase with excessive bone loss).
* incisive papilla is situated on the line passing through the tips of the canines in the dentate person
1. Lip:
* The anterior teeth should be placed to support the lips to maintain the normal muscle tone.
* Placing them too far posteriorly allows the muscles to go unsupported and lips to sag.
* Placing them too far anteriorly stretches the muscles and results in a smaller looking mouth.
* The need for lip support from the teeth and denture flange varies depending upon the degree of ridge resorption.
1. Crest of the ridge:
* Upper anterior teeth anterior to the crest of the upper ridge
* Lower anterior teeth over the crest of the lower ridge
* Over bite: the vertical distance between the incisal edges of maxillary and mandibular teeth(0.5mm)
* Over jet: the horizontal distance between the incisal edges of maxillary and mandibular teeth.(1-2mm)

**Artificial teeth arrangement**

**Maxillary cast:**

1-A line is drawn parallel to the frontal plane that touches the anterior margin of the incisive papilla, aids in the positioning of the upper central incisors.

2-The midline follows the mid palatal suture & bisects the incisive papilla, this line is perpendicular to line1.

3-The canine eminence line is recorded on the cast when it is present

 **Mandibular cast:**

1-A line is drawn parallel to the frontal plane bisecting the residual ridge, aids in positioning of the mandibular central incisors.

2-A point designates the crest of the residual ridge from the canine point to the middle of retromolar pad, aides in the anterior-posterior position of the mandibular posterior teeth.

3-A line that bisects the vertical height of the retromolar pad aides in establishing the vertical position of the occlusal surfaces of the posterior teeth.

Techniques:

Upper central incisor:

* Long axis shows slight mesial inclination
* The incisal edge is on the occlusal plane
* The neck of the tooth should be slightly depressed

 Upper lateral incisor

* Long axis shows more mesial inclination
* The incisal edge is usually 0.5- 1mm above the occlusal plane
* The neck of the tooth depressed more than that of central incisor

Upper canine

The canine tooth is an important tooth in any tooth arrangement because it forms the corner of dental arch

* Long axis perpendicular to the occlusal plane
* The cusp tip touches the occlusal plane
* The neck of tooth should be prominent (support the corner of the mouth)

Upper anterior teeth will generally follow the contour of the lower lip.

When making the f and v sound the anterior teeth will contact the mucosal part of the lower lip.

lower central incisor

* Long axis shows slightly inclined mesially
* The incisal edge should form 1-2 mm horizontal and vertical overlap in respect with upper central incisor (above the occlusal plane)
* The neck of the tooth should be slightly depressed

Lower lateral incisor

* Long axis mesially inclined
* It placed as in central incisor

Lower canine:

* Long axis slightly inclined mesially
* The neck of tooth should be set prominent and the cusp tip 2mm above the occlusal plane

The anterior teeth should be arranged to provide:

1-proper lip support.

2-permit satisfactory phonetics.

3-pleasing aesthetics.