

# PROSTHESIS

## COMPLETE DENTURE

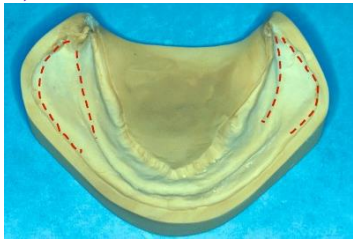
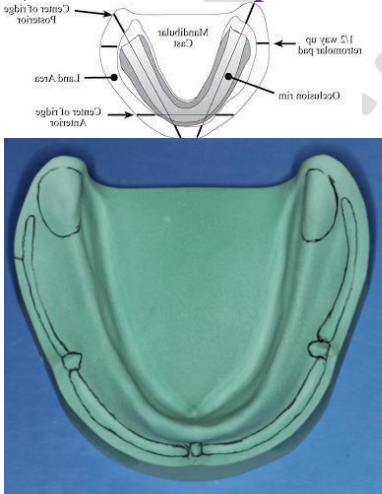


Lecture 4

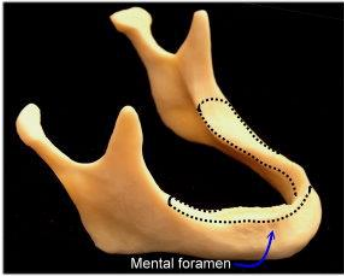
Intra oral landmarks

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## Mandibular landmark

Anatomical landmark	Description	Prosthetic value
<b>1) Residual ridge</b>	<ul style="list-style-type: none"> <li>✓ The portion of the alveolar process and its soft tissue covering that remain after extraction.</li> <li>✓ The <b>highest continuous surface</b> of the ridge is called the <b>crest of the ridge</b></li> <li>✓ Mandibular ridge have tendency to resorb from lingual side , upper tend to resorb from facial side (make class III)</li> </ul>	<ul style="list-style-type: none"> <li>✓ Well formed (<b>U shaped</b>): <b>secondary stress bearing area.</b></li> <li>✓ <b>Knife edge</b> (resorption from lateral sides) <b>relief area</b></li> <li>✓ <b>Flat ridge</b>: total resorption till height of it may equal the floor of the mouth lower and palatal vault upper (<b>secondary stress bearing area</b>).</li> </ul>
<b>2) Buccal shelf area</b> 	<ul style="list-style-type: none"> <li>✓ Bounded <b>externally by the external oblique ridge and internally by the slope of the residual ridge.</b></li> <li>✓ The bone in this area is very dense Forces of occlusion can be directed more nearly at right angles to it.</li> <li>✓ <b>Anteriorly mental foramen , posteriorly ramus</b></li> </ul>	<ul style="list-style-type: none"> <li>✓ It is considered the main <b>primary stress bearing area</b> to give support</li> <li>✓ Not extend the area of external oblique ridge to prevent displacement of denture during buccinators muscle move</li> </ul>
<b>3) Retro-molar pad</b> 	<ul style="list-style-type: none"> <li>✓ It is <b>pear-shaped</b> bulge of mucous membrane at the posterior end of the mandibular alveolar ridge, distal to 3rd molar</li> <li>✓ <b>Loose areolar connective tissue</b></li> <li>✓ Bounded <b>medially and laterally by the fibers of temporalis muscle.</b></li> <li>✓ Because of its spongy nature it acts as a cushion or shock absorbent.</li> <li>✓ It also provides a <b>posterior seal</b> for the mandibular denture.</li> </ul>	<ul style="list-style-type: none"> <li>✓ <b>Determine</b> the level of the lower <b>occlusal plane</b> which locating with 2/3 its vertical length to make occlusal plane slight under the maximum convexity of the tongue.</li> <li>✓ Also can determine bucco-<b>lingual position of teeth</b> by draw buccal line on buccal border of retromolar par will and lingual border of it will create space that artificial teeth must be on it</li> <li>✓ If draw line center of retro-molar pad must be in the central groove of the teeth</li> <li>✓ <b>Resist backward movement of denture.</b></li> </ul>

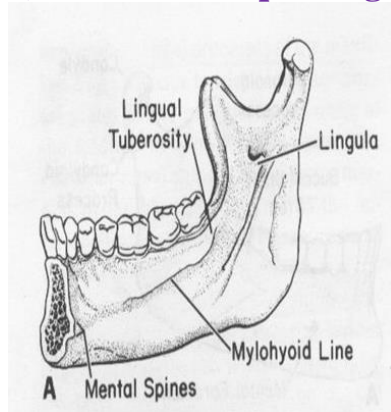
#### 4) Mental nerve



- located on the buccal surface of the mandible in the premolar region **between the roots of the first and second premolar**
- The mental nerves and vessels pass through it.

- In cases of **sever ridge resorption**, the mental foramen is usually **located on the crest of the ridge**. In such cases, **relief of the denture in this area** is necessary **to avoid numbness** of the lower lip.

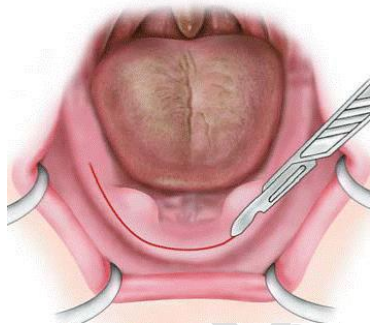
#### 5) Internal oblique ridge



- Irregular bony ridge of the median surface of mandible to **which mylohyoid muscle attach** which (from the floor of the mouth).
- Lower level in anterior and higher in posterior

- It must be covered by the denture
- **If it is sharp and prominent it should be reduced surgically or otherwise relieved.**
- Indicator of amount of bone resorption due to in excessive bone resorption cases it migrate to be close to crest of the ridge.

#### 6) Torus mandibularis



- ✓ It is a **bony projection** sometimes found on the inner surface of the mandible in the **premolars region**.
- ✓ It may be unilateral or bilateral.

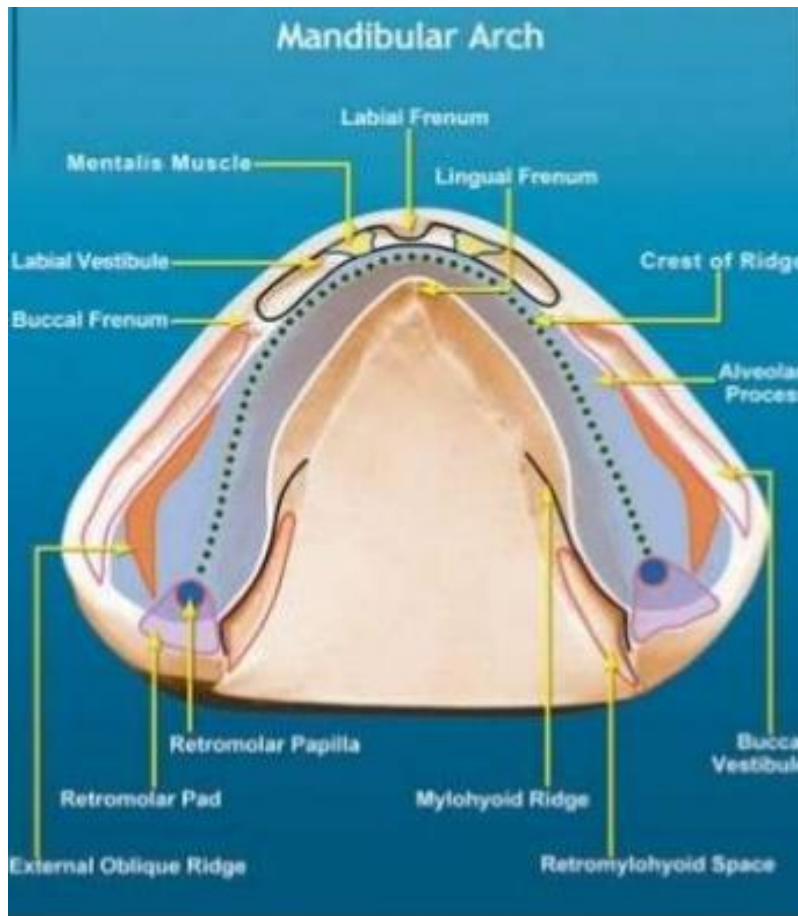
- ✓ It is covered by a thin mucous membrane, Where **relief of the lower denture** in this area will be necessary.
- ✓ Large cases that interferes with **the seating of denture or with the tongue it should be removed surgically**

#### 7) Genial tubercle



- These are **four small prominences** located on the inner surface of the mandible, one on **each side of the symphysis**.
- The genioglossi muscles are attached to their **upper surface** and the geniohyoid to their **lower surfaces**

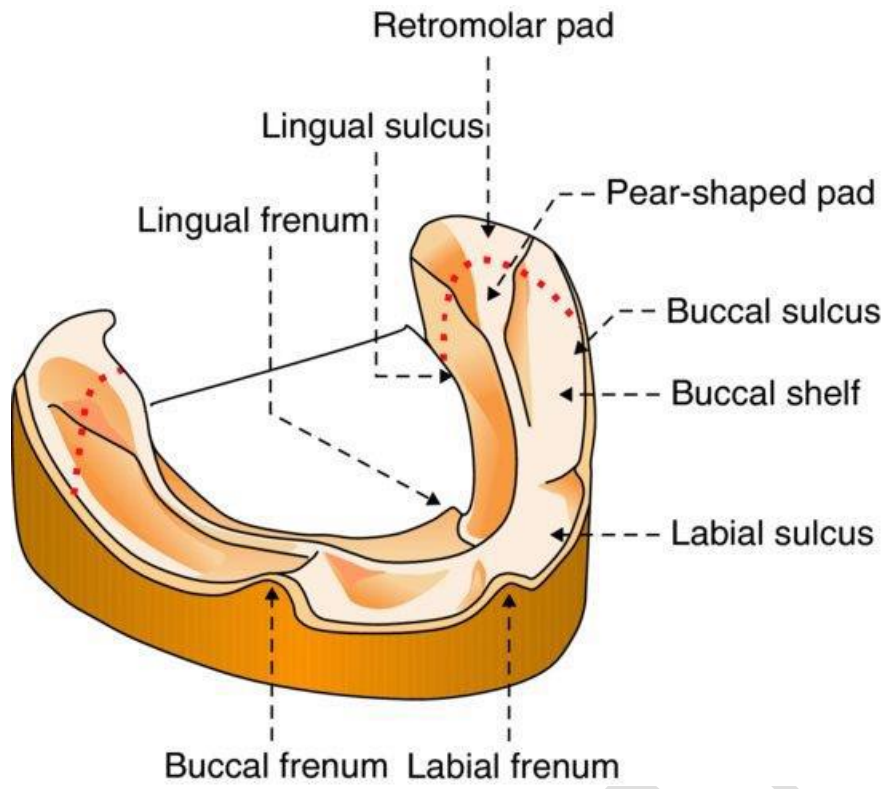
- In extreme alveolar bone resorption; they may be located on the crest of the ridge
- In moderate cases it's **relieved**
- **considered 1ry stress bearing area in case id skin graft.**



**Mandibular landmark (limiting structure)**

1) Labial frenum	<input type="checkbox"/> As maxilla	<input type="checkbox"/> As maxilla
2) Labial vestibule (sulcus)	<input type="checkbox"/> As maxilla	<input type="checkbox"/> As maxilla
3) Buccal frenum	<input type="checkbox"/> As maxilla	<input type="checkbox"/> As maxilla
4) Buccal vestibule	<input type="checkbox"/> As maxilla	<input type="checkbox"/> As maxilla
5) External oblique ridge	<input type="checkbox"/> Ridge extend from the ramus of mandible till mental foramen	<input type="checkbox"/> Denture should not extend beyond it – to avoid denture displacement by buccinator muscle
6) Masseter muscle influencing area:	<input type="checkbox"/> The distobuccal corner of the mandibular denture is in relation to the masseter muscle.	<input type="checkbox"/> In this area the buccal flange of the denture must converge rapidly in a medial direction to avoid displacement due to contraction of the masseter muscle.

<p><b>7) Palatoglossal arch: (Tonsillar space)</b></p>	<p><input type="checkbox"/> It is formed by the <b>palatoglossus muscle</b></p>	<p><input type="checkbox"/> <b>Over extension of the distolingual border of the lower denture will cause sore throat as a result of pressure on the muscle.</b></p>
<p><b>8) Lingual pouch: (alveo-lingual space)</b></p>	<p><input type="checkbox"/> The lingual pouch is bounded :</p> <p><input type="checkbox"/> <b>Posteriorly by palatoglossus muscle.</b></p> <p><input type="checkbox"/> <b>anteriorly by the mylohyoid muscle</b></p> <p><input type="checkbox"/> <b>medially by the lateral aspect of the tongue</b></p> <p><input type="checkbox"/> <b>Laterally by the medial aspect of the mandible.</b></p>	<p><input type="checkbox"/> From the retromolar pad the denture flange must be carried downwards to the depth of the lingual pouch.</p> <p><input type="checkbox"/> The mylohyoid ridge must be covered, however if it is sharp, relief must be done. <b>Surgical removal is indicated if it is pronounced.</b></p> <p><input type="checkbox"/> <b>Denture over extension in this area make patient feel sore throat</b></p>
<p><b>9) Sublingual salivary gland area:</b></p>	<p><input type="checkbox"/> Present at <b>premolar area above mylohyoid muscle</b></p>	<p><input type="checkbox"/> It should not be covered by the denture base.</p> <p><input type="checkbox"/> The <b>salivary glands change their size during function</b></p> <p><input type="checkbox"/> The mm. of the floor of the mouth is the least keratinized and the most <b>sensitive to irritation.</b></p>
<p><b>10) Lingual frenum</b></p>	<p><input type="checkbox"/> It is a fold of m.m. that extends from the floor of the mouth to the under surface of the tongue in the midline.</p> <p><input type="checkbox"/> It overlies the genioglossus muscle and moves with the movement of the tongue.</p>	<p><input type="checkbox"/> <b>A notch must be made in the lingual flange for the lingual frenum</b></p>



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