



Mandibular Anatomical Landmarks

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Limiting structures

- Labial frenum
- Labial vestibule
- Buccal frenum
- Buccal vestibule
- Lingual frenum
- Alveololingual sulcus
- Retromolar pad

Supporting structures

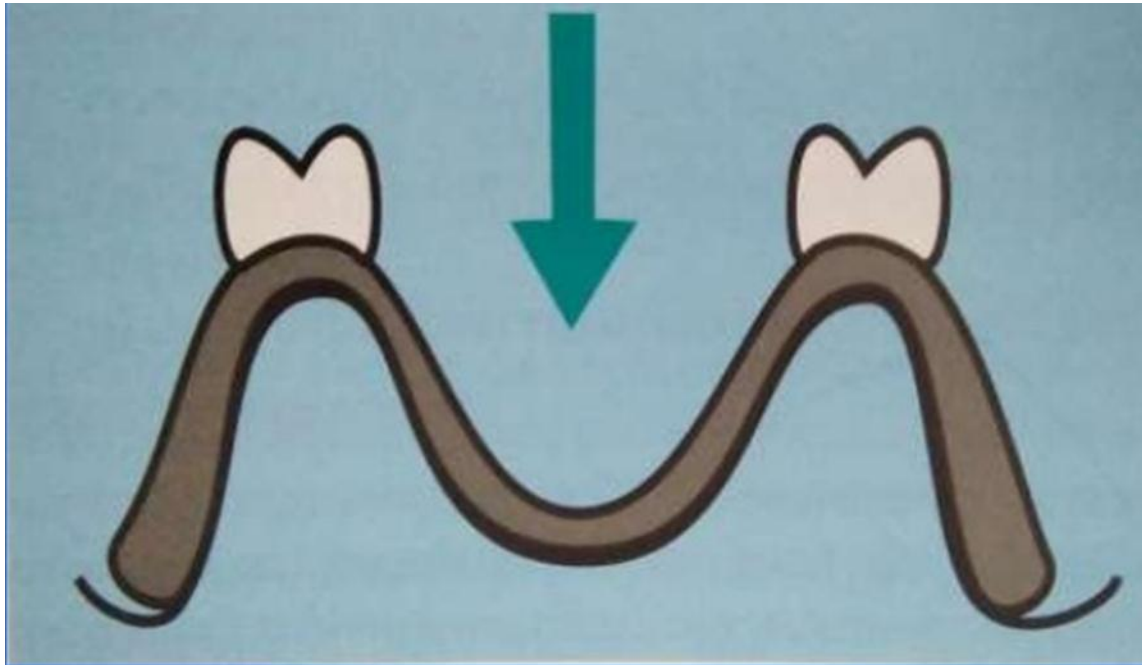
- buccal shelf area.
- residual alveolar ridge.

Relief areas

- mental foramen.
- genial tubercle.
- Mylohyoid ridge.
- Torus mandibularis.

support

Resistance to vertical movement or displacement of the dentures towards the basal seat area



Supporting landmarks

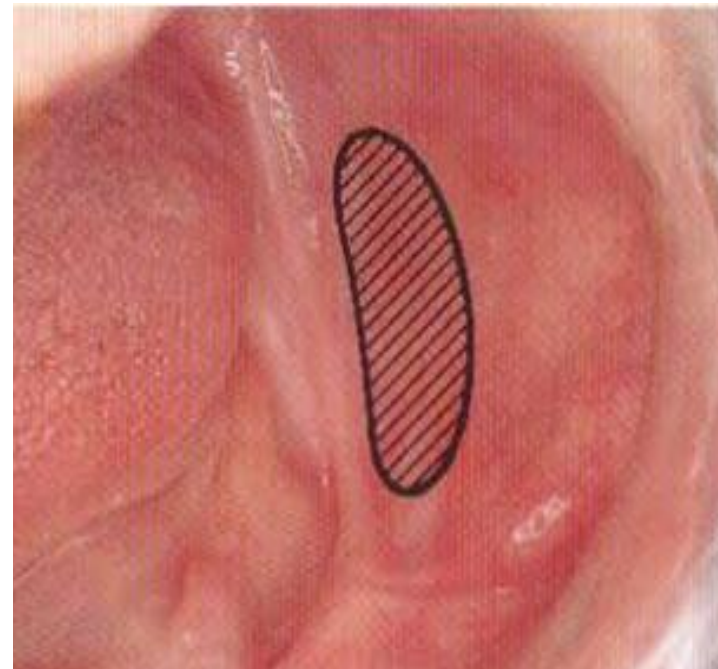
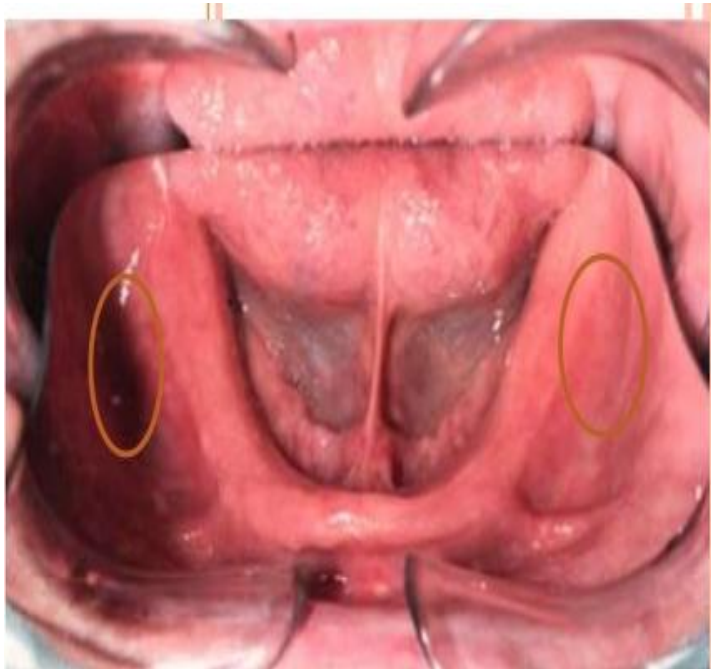
- **Residual alveolar ridge:**

The bone of crest is spongy bone therefore not be favorable as primary stress bearing area.



- o **Buccal shelf area:**

It is considered as a primary stress-bearing area because it is covered by compact bone. It provides support to denture because it is perpendicular to the vertical masticatory forces.



Limiting structures

Anatomical Landmarks that limit the Periphery of the denture.

These are the sites that will guide us in having an optimum extension of the denture so as to engage maximum surface area coverage without encroaching upon the muscle actions. Encroaching these structures will lead to dislodgement of the denture and/or soreness of the area while failure to cover the areas up to the limiting structure will decreased retention , stability and support.

o Labial frenum:

fold of mucous membrane not pronounced as maxilla . It active during mastication because it may contain fibrous band attached to orbicularis oris muscle. Proper fit around it provide sealing.



o Labial vestibule:

extend from labial frenum to buccal frenum. The denture flange limited by the attachment of muscles close to the crest. Overextension causes instability and soreness.



- o **Buccal frenum:**

It is either U-shaped or narrow V-shaped must have enough space in order to get proper denture seal.



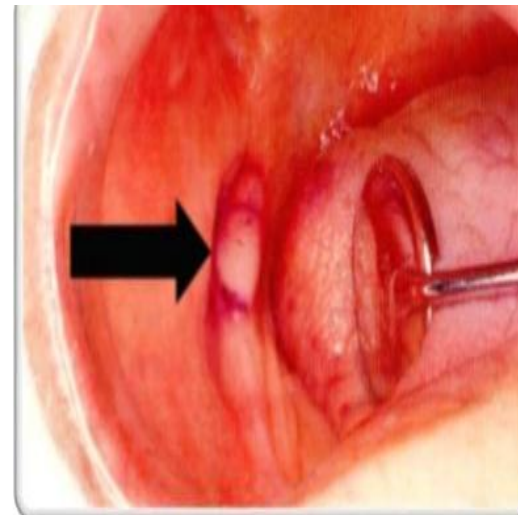
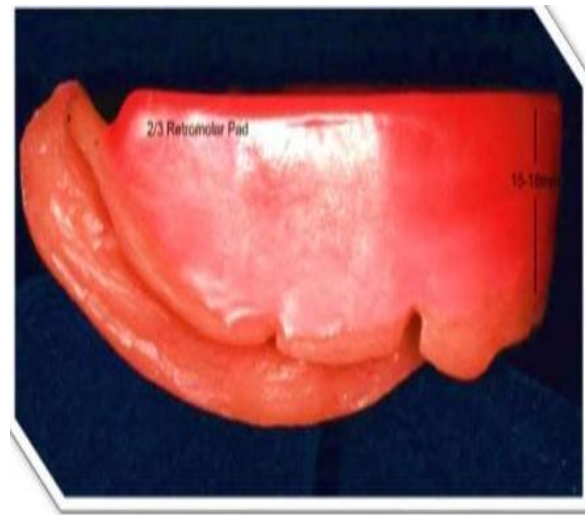
Buccal vestibule:

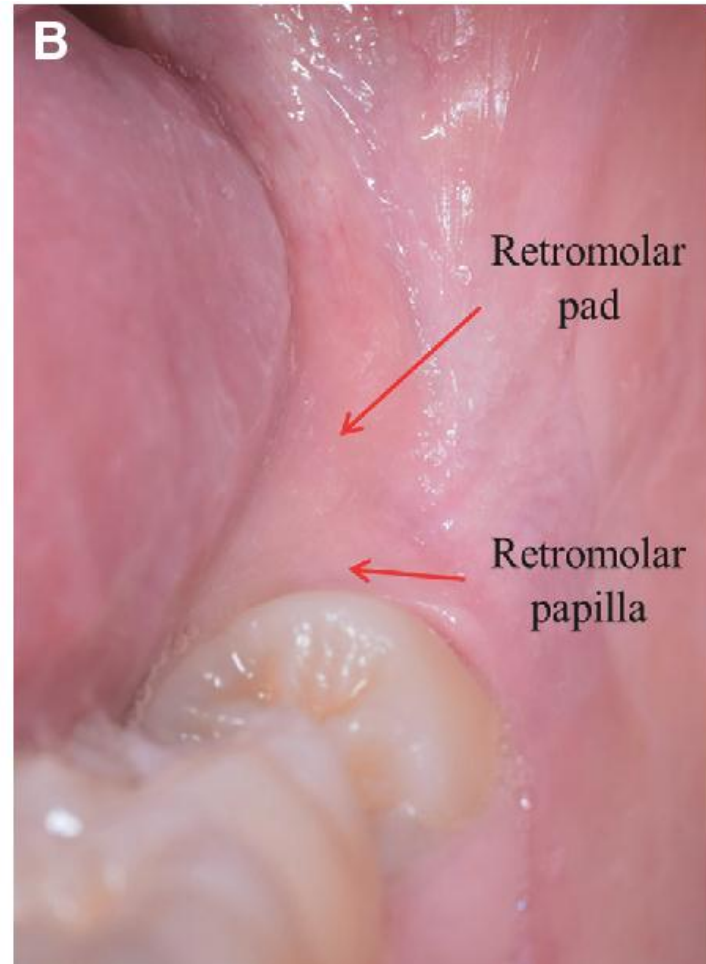
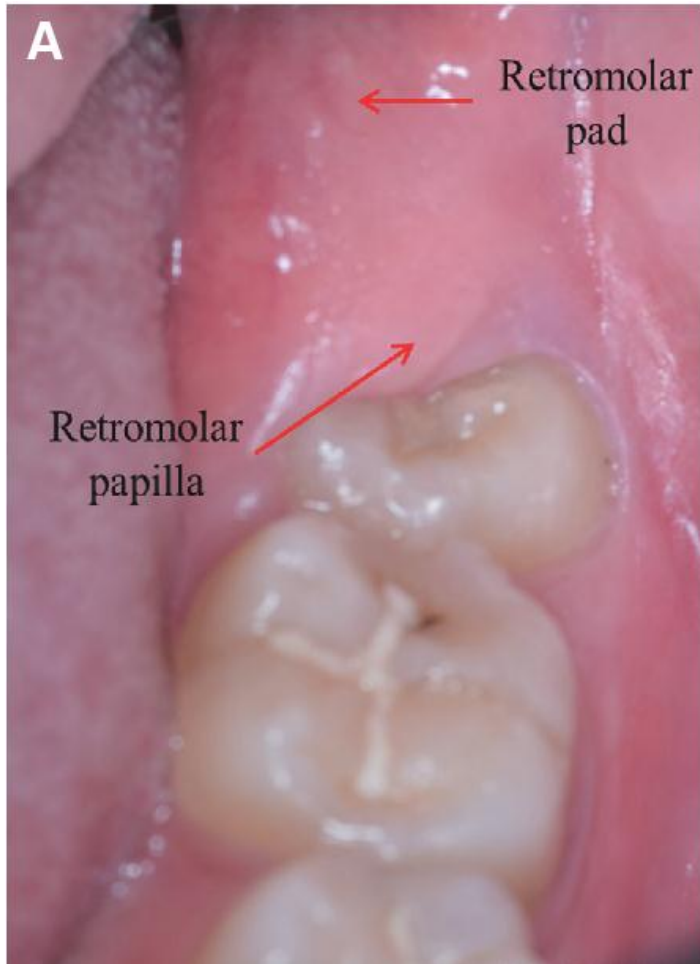
Extended from buccal frenum to the distal end of the residual ridge.



○ Retromolar pad:

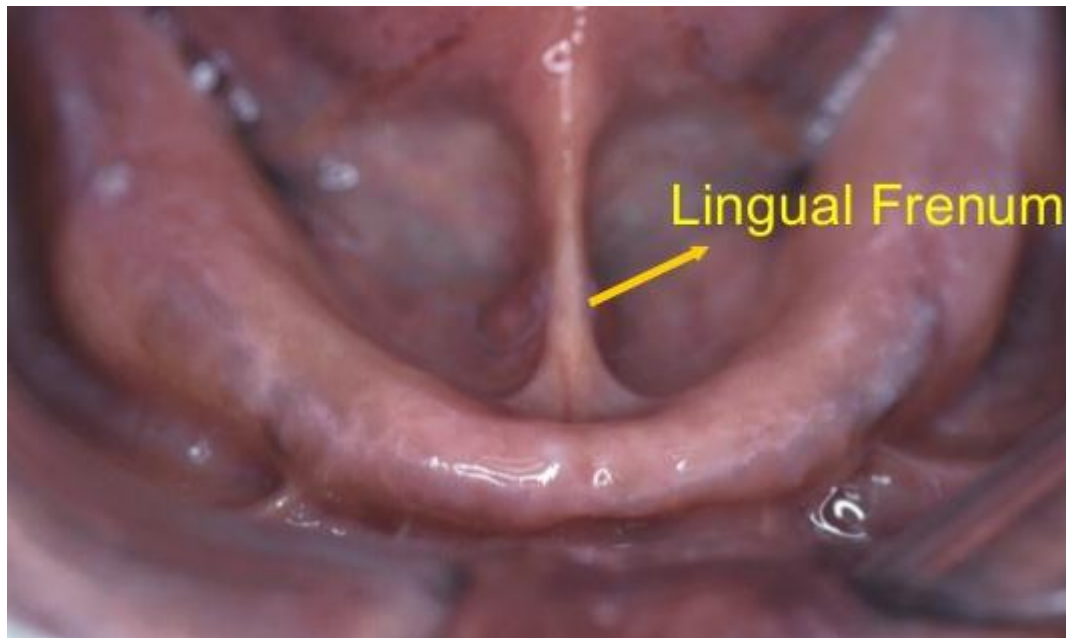
Is pear shaped area at the distal end of residual ridge. Must be covered by the denture to perfect the seal of the denture. Retromolar papilla anterior to the retromolar pad.





◦ **Lingual frenum:**

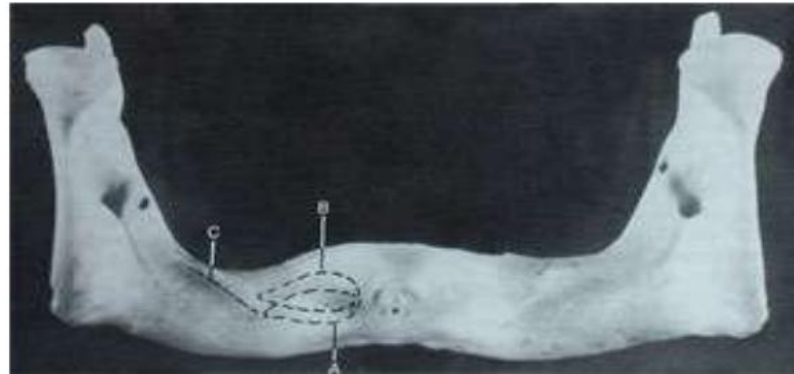
Fold of mucous membrane can be observed when the tongue elevated . Must be molded well during impression to prevent displacement and ulceration .



o **Alveololingual sulcus:** extended from lingual frenum to the retromylohyoid curtain. Divided into:-

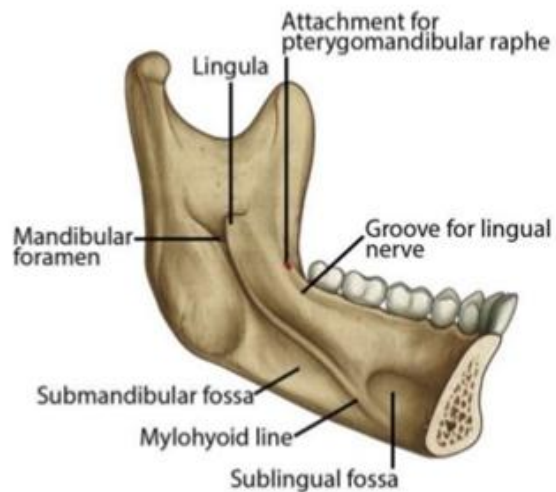
-**Anterior region:** from lingual frenum to premylohyoid fossa.

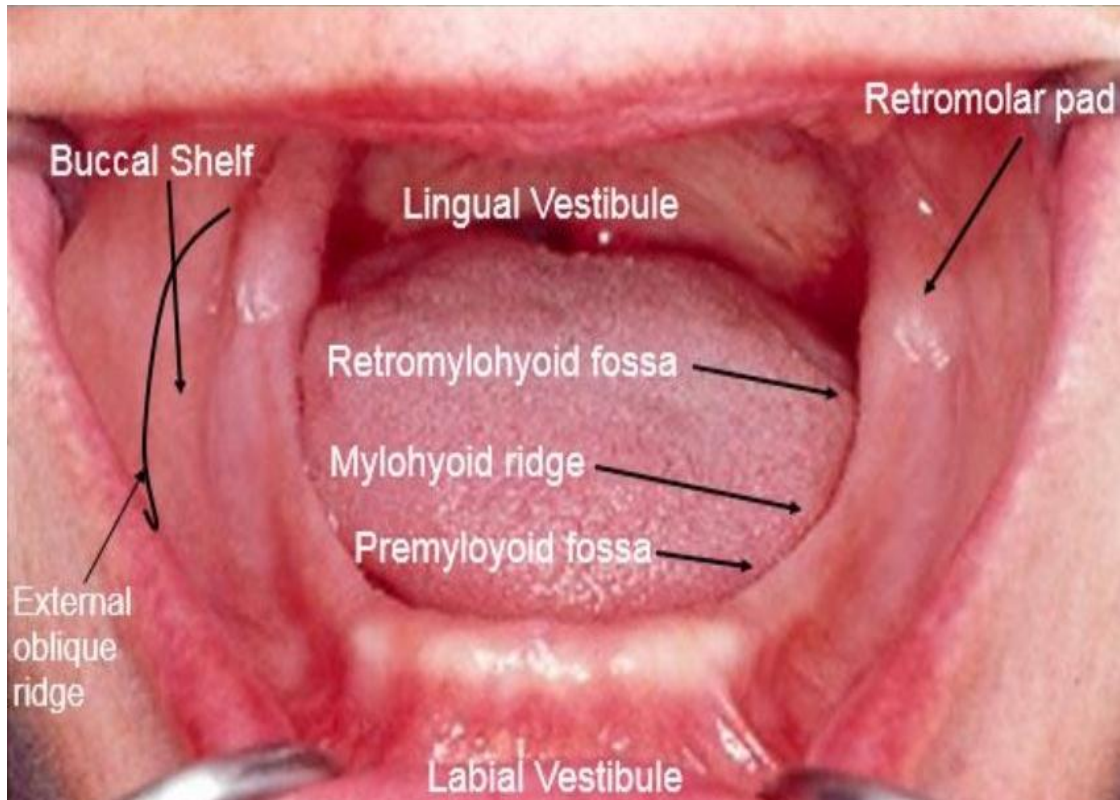
-**Middle region:** from premylohyoid fossa to the distal end of the mylohyoid ridge .



-Posterior region:

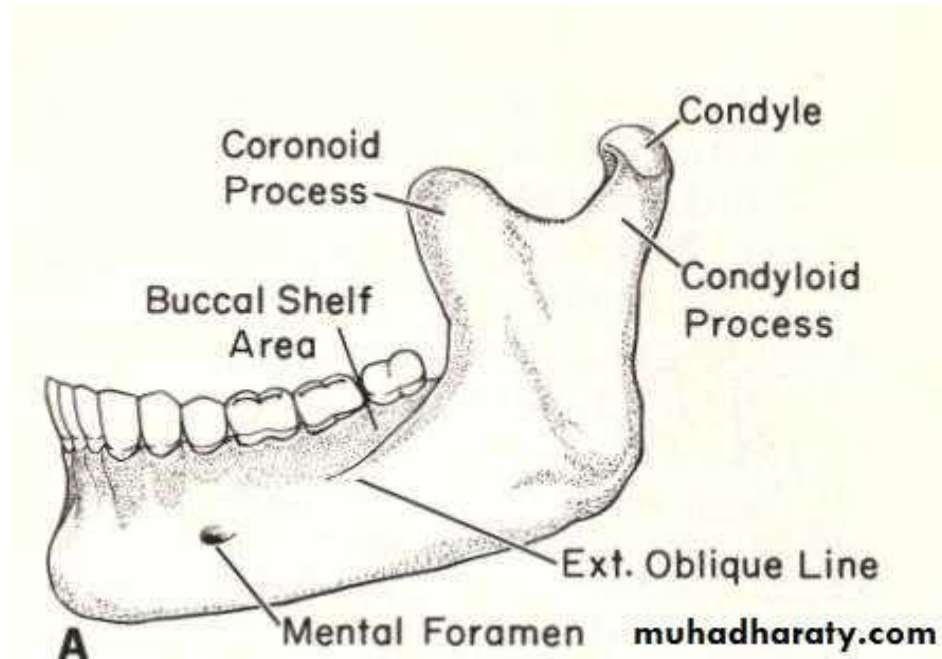
Is this retromylohyoid space or fossa. Lingual flange must fill retromylohyoid fossa. Proper recording impression gives S-shaped of the lingual flange.





o External oblique ridge:

Extended from just above the mental foramen to be continuous with the anterior border of the ramus. it become a guide for the termination of the buccal flange.



Relief area

- Relief areas are areas where they are either **resorb** under constant load, having fragile structures within or covered by thin mucosa which can be easily **traumatized**.
- It should be designed in such away that the masticatory load is not concentrated over these area.

o **Mental foramen:**

Located between 1st and 2nd premolar region. The denture should be relieved over foramen to prevent pressure being applied on mental nerve and vessels.



- o **Genial tubercles:**

pair of bony structures found anteriorly on the lingual side of mandible.



o Torus mandibularis:

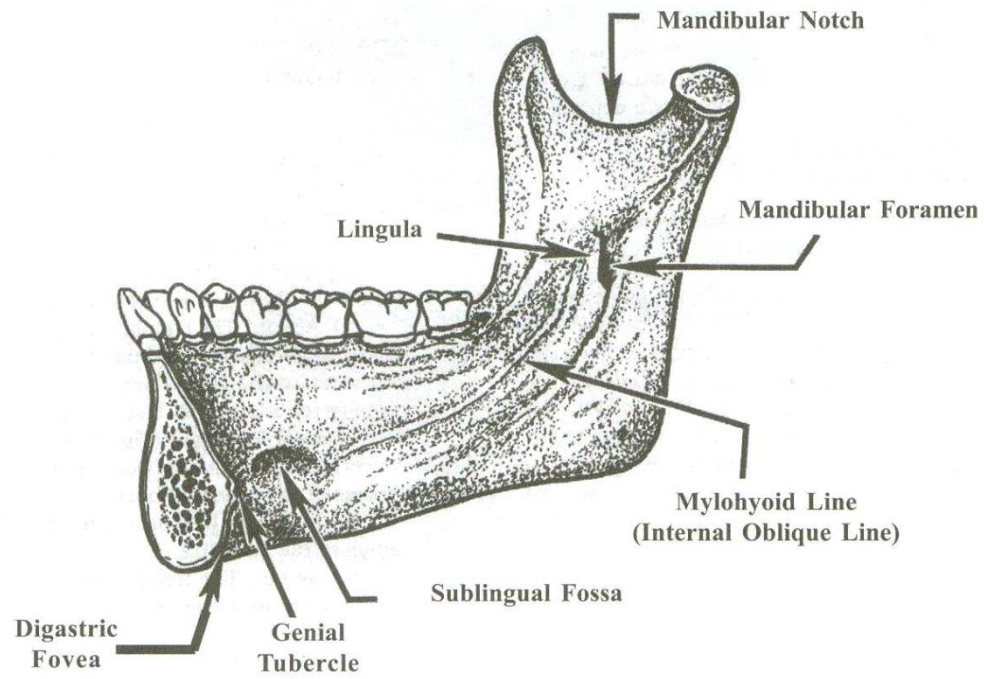
These are bony exostosis found on the lingual surface of the mandible at premolar area.

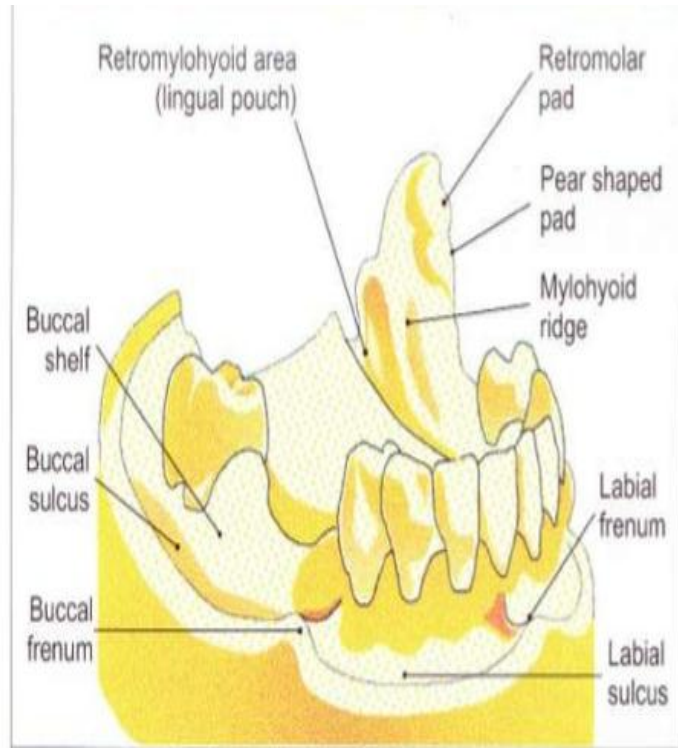
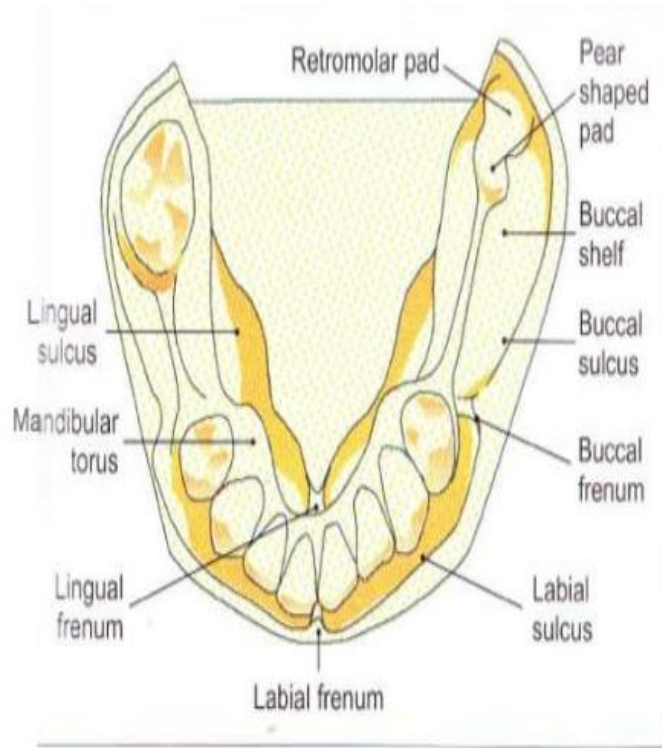


o Mylohyoid ridge:

It is an irregular bony crest on the lingual surface of the mandible .the border of the lingual flange may extend below the mylohyoid line if it slopes toward the tongue.









THANK

YOU