

MANDIBULAR INCISORS (central incisor)

The mandibular incisors are *four* in number. The mandibular central incisors are the smallest teeth in the permanent dentition. These are smaller when compared with the maxillary incisors and mandibular lateral incisors. These teeth are bilaterally symmetrical, with similar dimensions both on the mesial and distal aspects of the crown. They are in contact with the central incisors mesially and with the canines distally.



c) lower left central incisor; (d) lower left lateral incisor

Labial Aspect of mandibular central incisor

1. **The shape of the crown:** The shape of the crown is trapezoidal from the labial aspect.
2. The labial surface is smooth and flat, unlike the maxillary incisors in the incisal third. The middle third shows mild convexity and gradually merges with the root surface
3. Shape of the root: The root is cone-shaped and has a blunt apex.
4. Cervical outline: The mandibular central incisor has a semicircular cervical outline and the curvature is towards the root.
5. Incisal outline: The incisal outline is straight mesiodistally. Mamelons are present in the newly erupted teeth.

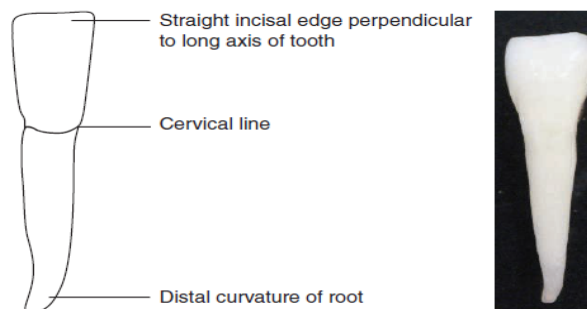


Figure 14.18 Labial aspect of the mandibular central incisor.

Lingual Aspect

1. Shape of the crown: The crown is trapezoidal as in the labial side.
2. Outlines of the crown: The outlines are similar to those of labial aspect.
3. Lingual surface: The lingual surface exhibits a cingulum and a lingual fossa bordered by marginal ridges, but they are not as prominent as in the maxillary incisors. The mesial marginal ridge is of the same length as the distal marginal ridge.

4. Outlines of the root: The outlines are similar to the labial aspect, but there is a lingual taper along the entire length of the root. This leads to a decrease in dimension towards the lingual side because of the lingual convergence.

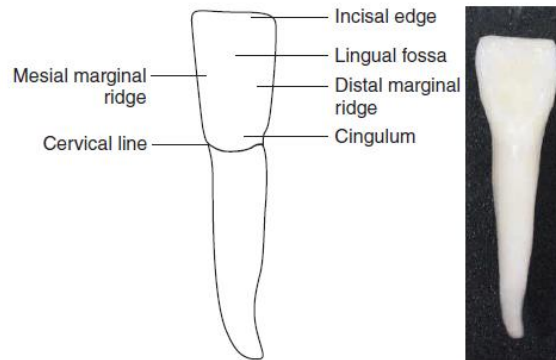


Figure 14.19 Lingual aspect of the mandibular central incisor.

Mesial Aspect

1. **Shape of the crown:** The crown is triangular or wedge-shaped in this aspect.
2. Labial outline: The labial outline from the crest of curvature is straight from the incisal edge to the cervical third and is slightly convex in the cervical third.
3. Cervical outline: The cervical curvature is convex towards the incisal edge.
4. Incisal outline: The incisal ridge forms the apex of the triangular shape of the mesial aspect of the crown and it is placed lingual to the root axis. Thus, the crown demonstrates a lingual tilt.
5. Contact area: The contact area in the mesial aspect is present in the incisal third.
6. Outlines of the root: Root concavity is present on the mesial aspect of the root, extending from the cervical third of the root to the apical third.

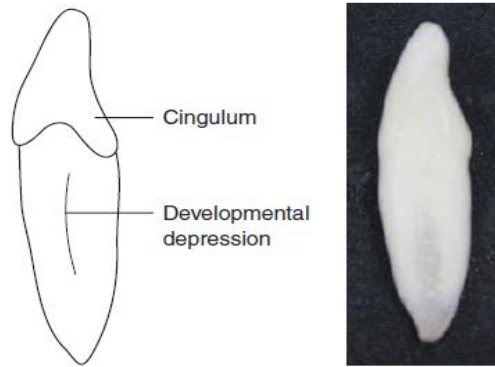


Figure 14.20 Mesial aspect of the mandibular central incisor.

Distal Aspect

1. Shape of the crown: The crown is triangular or wedge-shaped.
2. Outlines of the crown: The outlines of the crown are similar to the mesial aspect except that the depth of curvature is less prominent.
3. Contact area: The contact area is located at the incisal third of the crown.
4. Outlines of the root: The outlines of the root are similar to those of the mesial aspect.

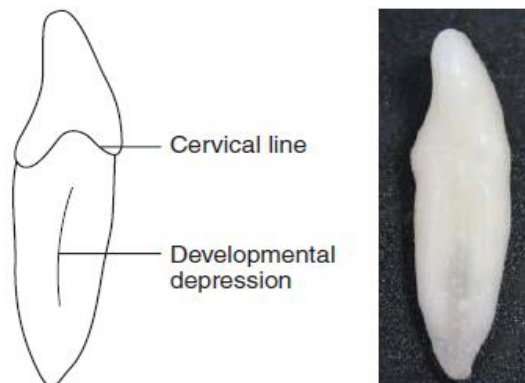


Figure 14.21 Distal aspect of the mandibular central incisor.

Incisal Aspect

1. **Shape of the crown:** The crown is roughly ovoid when viewed from the incisal aspect and bilaterally symmetrical which aids in distinguishing this tooth from the mandibular lateral incisor.

2. **Outlines of the crown:** The crown is bilaterally symmetrical from this aspect.

(a) **Labial outline:** The labial outline is straight and is at right angles to a line drawn labiolingually. This feature helps in differentiating between the central and lateral mandibular incisors.

(b) **Lingual outline:** The lingual outline is convex, with the mesial and distal marginal ridges converging towards the cingulum.

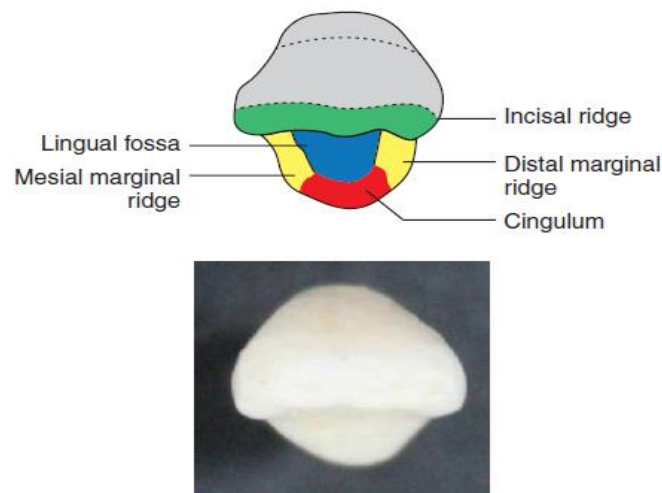


Figure 14.22 Incisal aspect of the mandibular central incisor.