

DEPARTMENT OF ORAL AND MAXILLOFACIAL PATHOLOGY & ORAL
MICROBIOLOGY

MANDIBULAR CANINE

● INTRODUCTION

MANDIBULAR CANINE- CHRONOLOGY

First evidence of calcification	4 to 5 months
Enamel completed	6 to 7 years
Eruption	9 to 10 years
Root completed	12 to 14 years

Measurement table

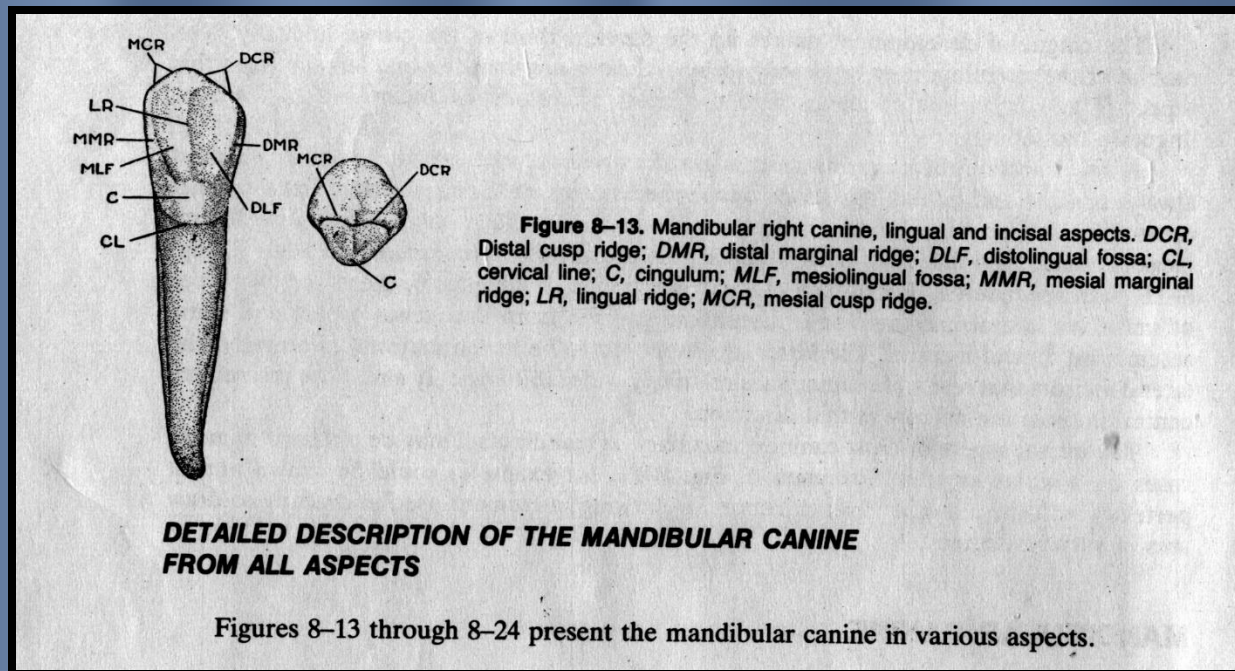
Cervico incisal length of crown	11.0mm
Length of root	16 .0mm
Mesiodistal diameter of crown	7.0mm
Mesiodistal crown at cervix	5.5mm
Labiolingual diameter of crown	7.5 mm
Labiolingual diameter at cervix	7.0mm
Curvature of cervical line mesial	2.5mm
Curvature of cervical line distal	1.0mm

- The mandibular canine crown is narrower mesiodistally than that of maxillary canine, although it is just as long in most instances and in many instances is longer by 0.5 mm to 1mm.
- The root may be as long as the maxillary canine, but usually it is somewhat shorter. The Labiolingual diameter of crown and root is usually a fraction of a millimeter less, adapting this measurement to the other anteriors.

- The lingual surface of the crown is smoother, with less cingulum development and less bulk to the marginal ridges. The lingual portion of this crown resembles the form of the lingual surfaces of the mandibular Lateral Incisors.

- The cusp of the mandibular canine is not as well developed as that of the maxillary canine, and the cusp ridges are thinner Labiolingually. Usually the cusp tip is on a line with the center of the root, from the mesial or the distal aspect, but sometimes it lies lingual to the line, comparable with mandibular incisors.

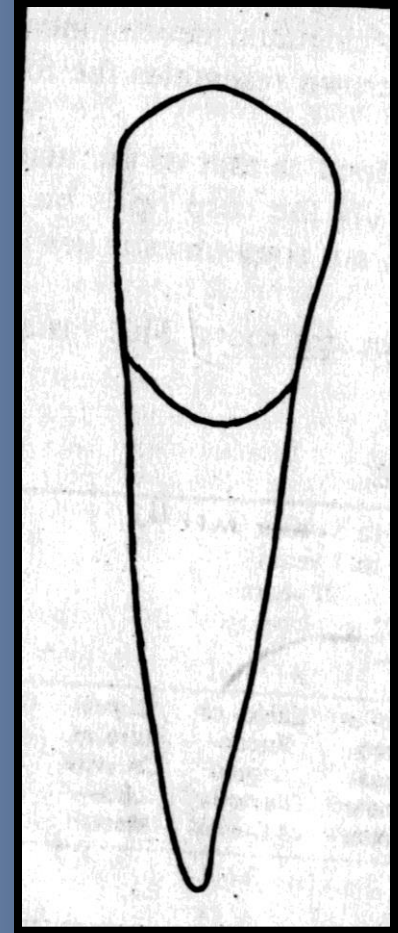
- A variation in the form of the mandibular canine is bifurcated roots. This variation in the form of the mandibular canine is not rare



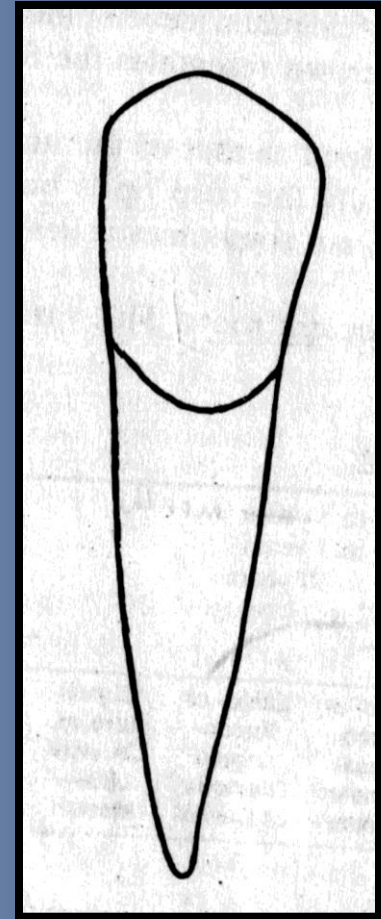
- DETAILED DESCRIPTION OF THE MANDIBULAR CANINE FROM ALL ASPECTS.

LABIAL ASPECT

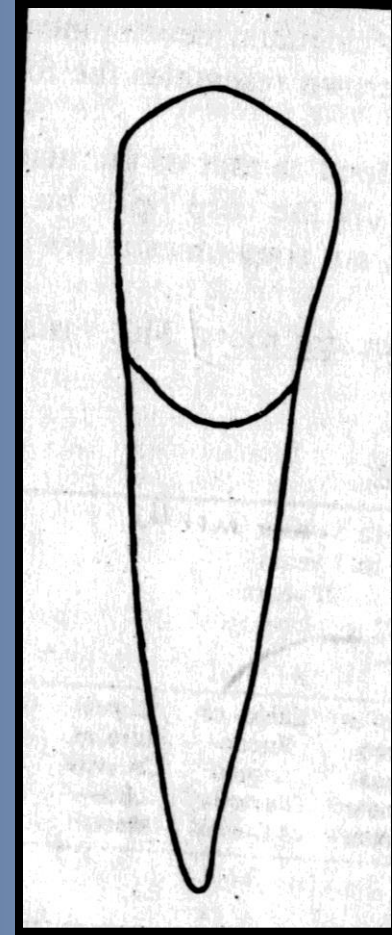
- The mesiodistal dimensions of the mandibular canine are less than those of the maxillary canine. The difference is usually about 1mm. The mandibular canine is broader mesiodistally than either of the mandibular incisors, for e.g., about 1mm wider than the mandibular Lateral Incisor.



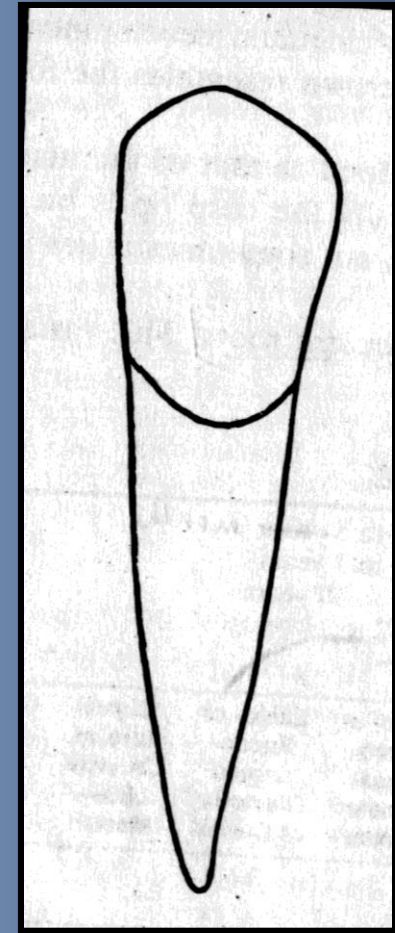
- The essential difference between mandibular and maxillary canines viewed from the labial aspect may be described as follows:
- The crowns of the mandibular canines appear longer. Sometimes they are longer, but the effect of greater length is emphasized by the narrowness of the crown mesiodistally and the height of the contact areas above the cervix.



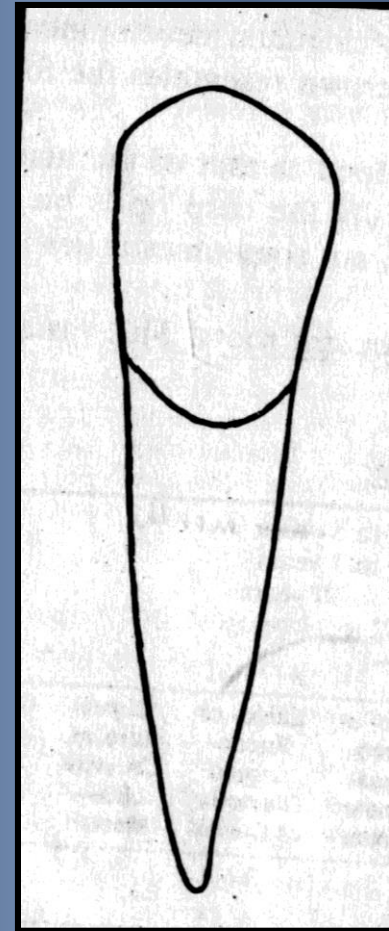
- The mesial outline of the crown of the mandibular canine is nearly straight with the mesial outline of the root, the mesial contact area being near the mesioincisal angle.
- When the cusp ridges have not been affected by wear, the cusp angle is on a line with the center of the root, as on the maxillary canine. The mesial cusp ridge is the shorter.



- The distal contact area of the mandibular canine is more toward the incisal than that of the maxillary canine, but not up to the level of the mesial area.
- The cervical line Labially has a semicircular curvature apically.
- Many mandibular canines give the impression from this aspect of being bent distally on the root base. The maxillary canine crowns are more likely to be incisal line with the root.

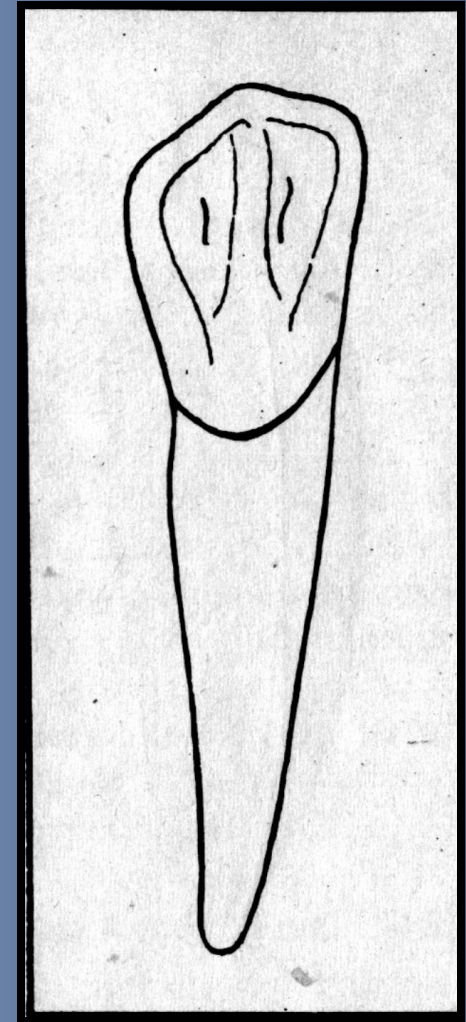


- The mandibular canine root is shorter by 1 or 2 mm on the average than that of the maxillary canine, and its apical end is more sharply pointed. Root curvatures are infrequent. When curvature of the root ends is present, it is often incisal a mesial direction.

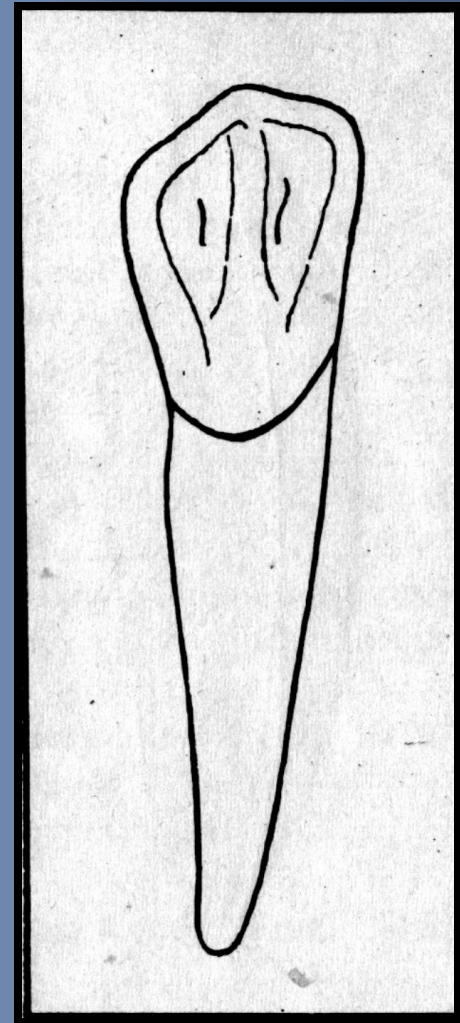


LINGUAL ASPECT

- In comparing the lingual aspect of the mandibular canine with the maxillary canine the following differences are noted.
- The Lingual surface of the crown of the mandibular canine is flatter, simulating the lingual surfaces of the mandibular incisors. The cingulum is smooth and poorly developed.

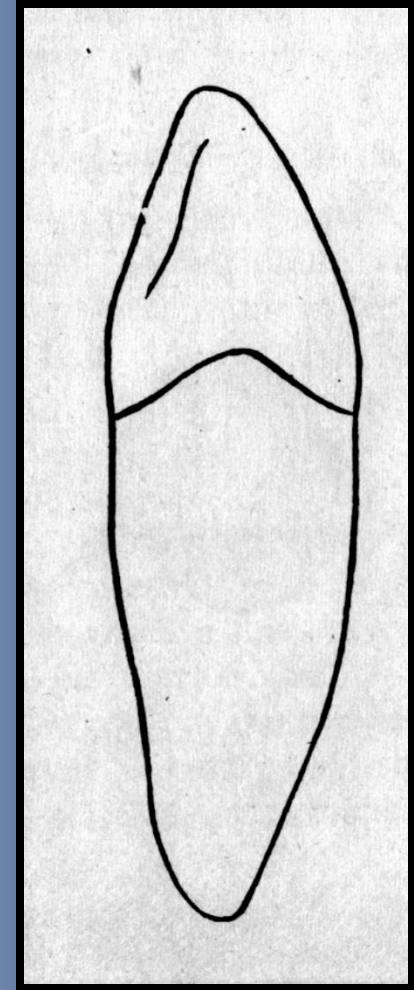


- . The marginal ridges are less distinct. This is true of the lingual ridge expect toward the cusp tip, where it is raised. Generally speaking, the lingual surface of the crown is smooth and regular.
- The lingual portion of the root is narrower relatively than that of the maxillary canine. It narrows down to little more than half of the width of the labial portion.

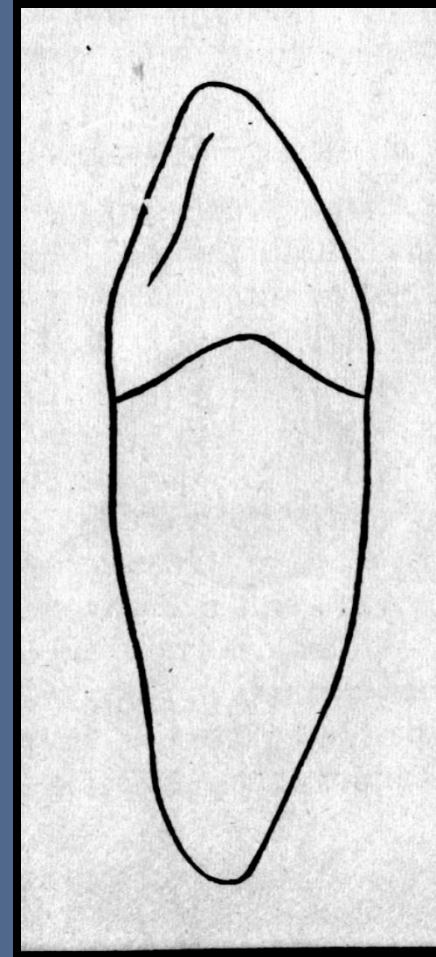


MESIAL ASPECT

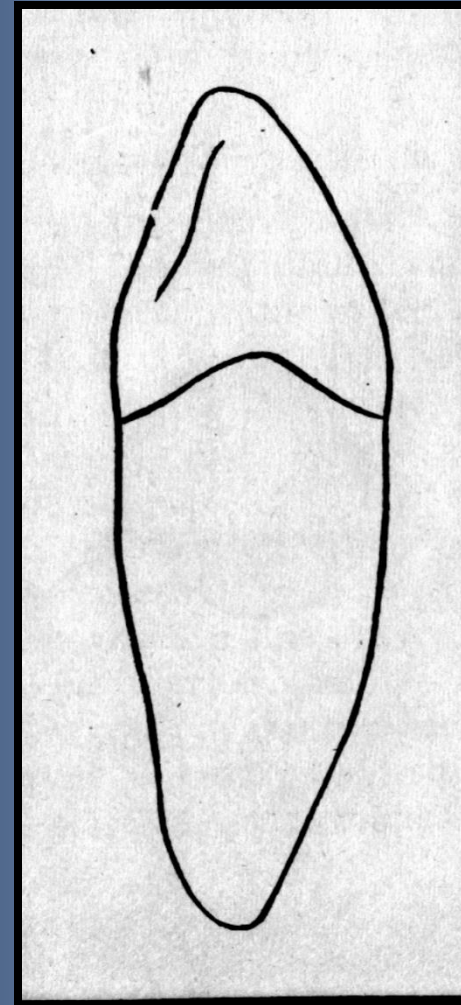
- From the mesial aspect there are characteristic differences between the two teeth in question. The mandibular canine has less curvature Labially on the crown, with very little curvature above the cervical line. The curvature at the cervical portion, as a rule, is less than 0.5 mm. the lingual outline of the crown is curved incisal the same manner as that of the maxillary canine, but it differs incisal degree.



- The cingulum is not as pronounced, and the incisal portion of the crown is thinner Labiolingually, which allows the cusp to appear more pointed and the cusp ridge more slender. The tip of the cusp is more nearly centered over the root, with a lingual placement in some cases comparable to the placement of incisal ridges on mandibular incisors.

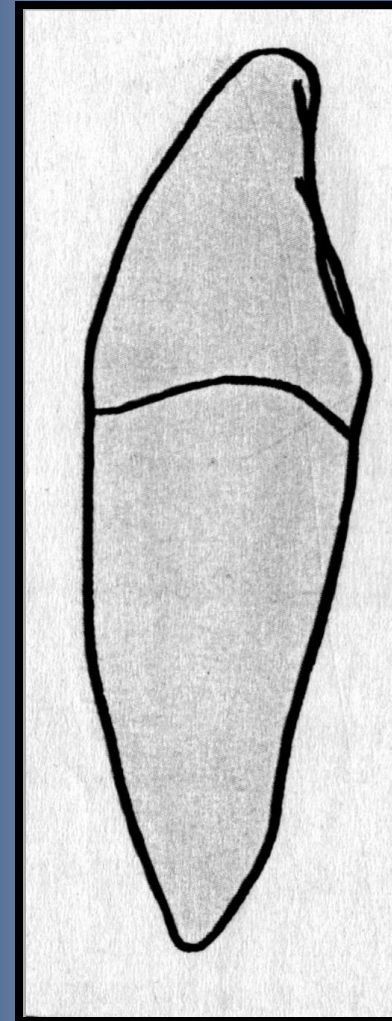


- The cervical line curves more towards the incisal portion than does the cervical line on the maxillary canine.
- The roots of the two teeth are quite similar from the mesial aspect, with the possible exception of a more pointed root tip. The developmental depression mesially on the root of the mandibular canine is more pronounced and sometimes quite deep.



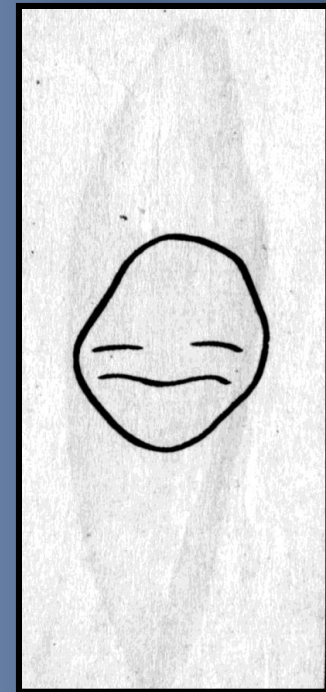
DISTAL ASPECT

- There is little difference from the distal aspect between mandibular and maxillary canines except those features mentioned under mesial aspect, which are common to both.

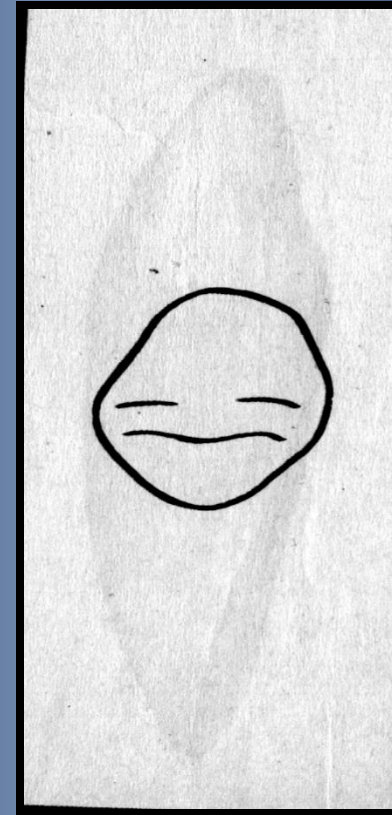


INCISAL ASPECT

- The outlines of the crowns of mandibular and maxillary canines from the incisal aspect are often similar. The main differences to be noted are these.



- The mesiodistal dimension of the mandibular canine is less than the Labiolingual dimension. In this there is a similarity, but the outlines of the mesial surface are less curved.



- . The cusp tip and the mesial cusp ridge are more likely to be inclined in a lingual direction, incisal the mandibular canine with the distal cusp ridge and the contact area extension distinctly so. It will be remembered that the cusp ridges of the maxillary canine with the contact area extensions were more nearly in a straight line mesiodistally from the incisal aspect.

