Maxillary Canine

The root canal system of the maxillary canine is similar in many ways to that of the maxillary incisors. A major difference is that it is wider labiolingually than mesiodistally. Another difference is that it has no pulp horns. Its smallest pointed incisal edge corresponds to the single cusp. The pulp chamber outline at the CEJ is oval. A lingual shoulder is present, which may prevent shaping and cleaning of the root canal in its lingual dimension. From this point, the root canal remains oval until it approaches the apical third of the root, where it becomes constricted. Because of this oval shape, the clinician must take care to circumferentially file labially and palatally to shape and clean the canal properly. Usually one root canal is present, although two canals have been reported (Table 7-10). The thin buccal bone over the canine eminence often disintegrates, and fenestration is an occasional finding. Accurate determination of the length is critical. Another

FIG. 7-86 Maxillary canine. Development and anatomic data:
average time of eruption, 10 to 12 years; average age of
calcification, 13 to 15 years; average length, 26.5 mm. Root
curvature (most common to least common): distal, straight, labial.

effect of this fenestration is a slight, permanent apical pressure sensitivity that occasionally occurs after root canal therapy. This sensitivity can best be corrected by apical root surgery.

The external access outline form is oval or slot shaped because no mesial or distal pulp horns are present (Figs. 7-86 through 7-89). The mesiodistal width of the slot is determined by the mesiodistal width of the pulp chamber. The incisogingival dimension is determined by straight-line access factors and removal of the lingual shoulder. The incisal extension often approaches to within 2 to 3 mm of the incisal edge to allow for straight-line access. The incisal wall meets the lingual surface of the canine in a butt joint to provide adequate thickness for restorative material, because this tooth is heavily involved in excursive occlusal guidance and function. All internal walls funnel to the orifice.
FIG. 7-87  Access cavity for a maxillary canine as viewed through the dental operating microscope. (×5.1 magnification with cervical fiberoptic transillumination.)
FIG. 7-88  Canine with multiple accessory foramina.

FIG. 7-89  Canine with lateral canal dividing into two canals.