MAXILLARY PREMOLARS

MAXILLARY FIRST PREMOLAR

- Average time of eruption: 10 – 12 years
- Average time of calcification: 12 – 13 years
- Average length: 22.5 mm
MAXILLARY FIRST PREMOLAR

- Access cavity is ovoid in BP dimension.
- Canal orifices lies below and slightly central to cusp tips.

Notes on Access

- Chamber is narrow M-D
- May not feel a “drop” into chamber
- Need to stop and feel with explorer

Notes on Access

- Crown much wider M-L than root at CEJ
- Easy to perforate

The dimension of the crown at the CE junction is much smaller than that of the occlusal table. Perforation if misdirected, can easily result in perforation into the periodontal space at the cervical margin.
MAXILLARY FIRST PREMOLAR

- Distal curvature in the root is not uncommon.
- Apical foramen is usually close to the anatomic apex.
- The apical portion of the roots often tapers rapidly, ending in narrow and curved root tips.

At least 75% have 2 canals.
MAXILLARY FIRST PREMOLAR


“Furcation grooves on the palatal aspect of the buccal roots of 35 maxillary first premolars, randomly selected, were assessed and found to exist in 97% of the sample”

MAXILLARY SECOND PREMOLAR

- Average time of eruption: 10 – 12 years
- Average time of calcification: 12 – 14 years
- Average length: 21.5 mm
MAXILLARY SECOND PREMOLAR

- Similar to first premolar in coronal morphology but it is narrower BP and wider MD than 1st
- Canal orifice located centrally and it appears as a slot more than as single ovoid opening.

Approximately 90% have one root
Approximately 50% have one canal
MAXILLARY SECOND PREMOLAR