

Maxillary

Tooth	Number of Canals	Canal Configuration	Avg Length	Comments	Authors
Central Incisor	1	I	22.5 mm	Include pulp horns / Lateral accessory canals / Portal of exit may not be at radiographic apex	Kasahara et al. Vertucci. Pineda et al
Lateral Incisor	1	I	22.0 mm	Same as above / Distal apical curvature / Dens in dente / Palato-radicular groove	Pineda and Kuttler; Vertucci
Canine	1	I	27.0 mm	Longest tooth in mouth / Buccal apical dilaceration	Pineda and Kuttler; Vertucci
1 st Premolar	1(9%), 2(85%) or 3 (6%)	I or II	21.0 mm	Mesial root concavity – careful with larger Gates / 3 canal teeth have very thin buccal roots	Carns & Skidmore
2 nd Premolar	1 (48%), 2 (51%) or 3 (1%)	I, II or IV	21.0 mm	Look for “Fast Break”	Vertucci, Seelig and Gillis
1 st Molar	3 or 4 (>90% have MB2)	I / II / III on MB root	B 19 mm L 21 mm	Assume 4 canals until disproven / Danger zone on MB root furcation with MB ₂ / P canal with buccal curvature	Stropko. Bone/Moule. Kulild and Peters
2 nd Molar	1 & 2 (rarely), 3 or 4	I / II / III on MB root	B 19 mm L 21 mm	Canal configuration may be linear instead of triangular / rhomboidal / Fused roots seen	Kulild and Peters

Guide to Weine Type Configuration:

Just remember: “I owe you, why?”
I O U Y



Mandibular

Tooth	Number of Canals	Canal Configuration	Avg Length	Comments	Authors
Lateral Incisor	1 (57%) or 2 (41%)	I / II / III	21.0 mm	Expand access lingually searching for 2 nd canal / Thin mesio-distal dimension	Benjamin and Dowson
Canine	1 (78%) or 2 (16%)	I / III	25.5 mm	Trace down Buccal or Lingual root wall with small file looking for 2 nd canal	Vertucci
1 st Premolar	1 (75%), 2 (24%) or 3 (1%)	I / II / III / IV	21.5 mm	Look for “Fast Break” / Possible “C” shape (up to 14%)	Vertucci. Baisden et al
2 nd Premolar	1 (98%) or 2 (2%)	I / II / IV	22.0 mm	Watch for mental foramen	Vertucci. Zillich & Dowson
1 st Molar	2(7%), 3(64%), 4 (29%) or rarely 5	II / III	21.0 mm	“Danger zone” on mesial root furcal area – careful with large Gates / Gain straight line access	Skidmore and Bjorndal
2 nd Molar	1(1%), 2(4%), 3(81%), 4(11%)	I / II / III or C-shaped	20.0 mm	“C” shape (3-8%) / Ribbon shaped distal canal seen / Most susceptible to root fracture	Weine, Pasiewicz & Rice. Cooke and Cox

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