Elite Endodontics Fall 2023

## Root Tips

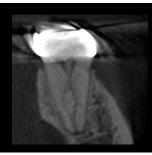
Michael P. Dyriw, D.D.S., M.S.

## **CBCT Standard at Elite Endodontics**

Although not recognized as a standard of care in Endodontics, in our practice, a CBCT has become as routine as taking a conventional two-dimensional radiograph. Early in my endodontic career I got burned by not taking a CBCT on what I assumed was a "routine" case. In dentistry, things are not always as they seem, and now, every tooth I treat receives a scan.



PA shows 2 mesial canals, 1 distal canal. Appears to be a straight forward case.



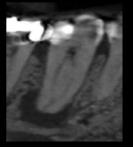
CBCT tells a different story with a 2-1-2-1 distal canal configuration. Knowledge is crucial to success.



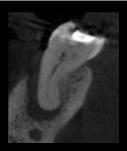
The limited Field of Vision (FOV) is the most ideal for use in endodontic diagnosis and treatment planning because of its capability in providing images with sufficient spatial resolution at a low radiation dose. In fact, the CBCT we use in our office has a voxel size (slice thickness) as small as 75  $\mu$ m. This shows incredible details we would otherwise potentially miss.



PA & sagittal view show classic PARL at the apex of the tooth, indicating root canal treatment.



Coronal slice showing unique anatomy and a "j" shaped lesion. Prognosis goes from favorable to questionable.





Utilization of CBCT can aid in endodontic diagnosis and management of a variety of conditions including periapical pathology, cracked teeth and vertical root fractures, nonsurgical and surgical cases, resorptive defects and traumatic injuries.



Fracture along the mesial root with isolated defect provides poor prognosis.

