Clinical Case Spotlight

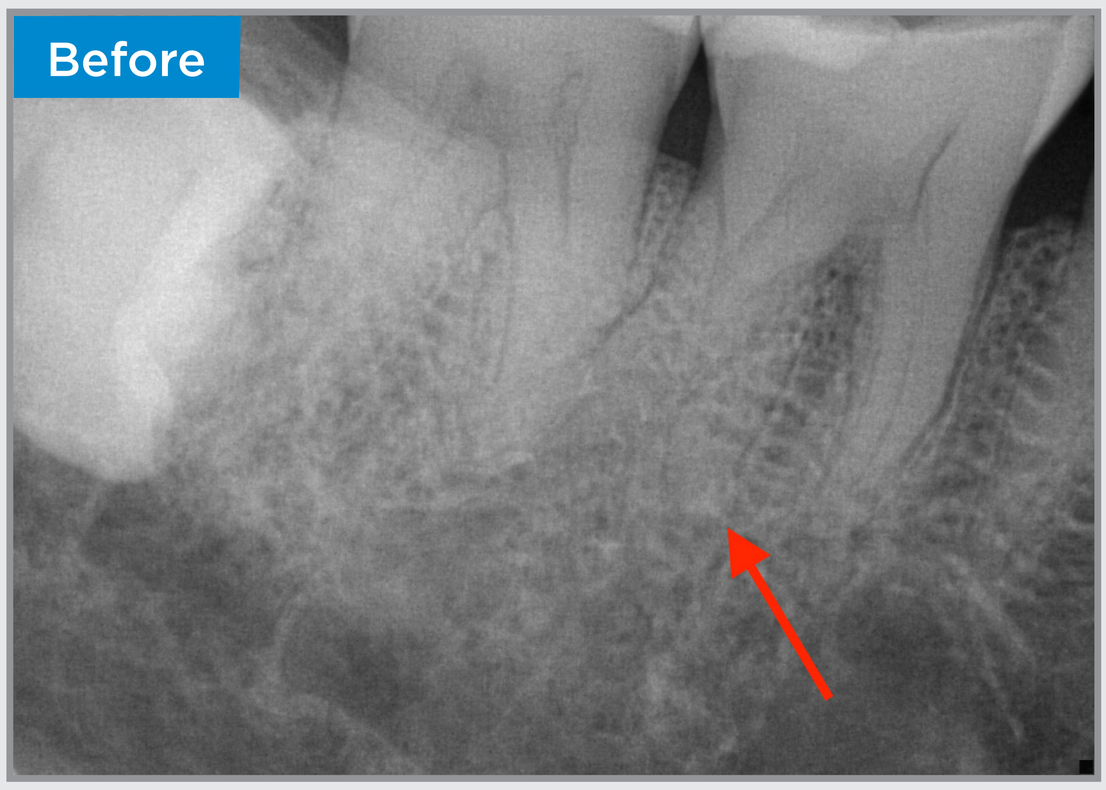
Irreversible Pulpitis on Tooth 46

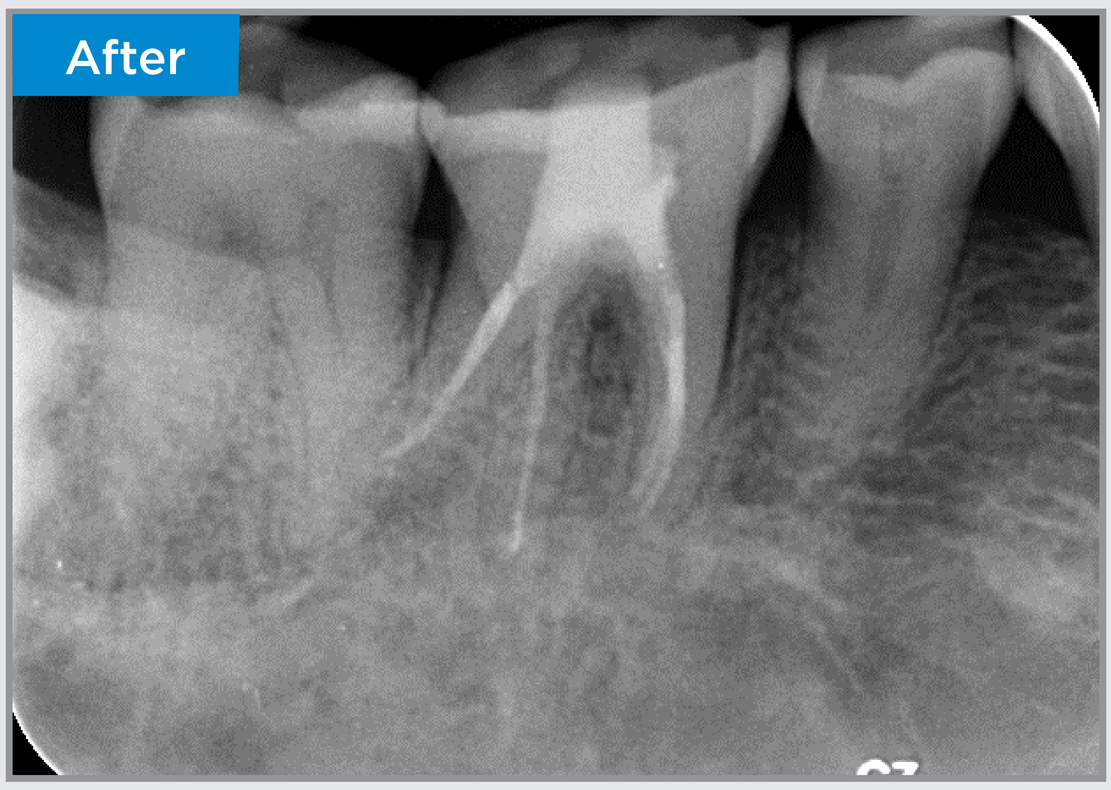
Dr Jack Lin, Endodontist
Sydney, NSW Australia

Introduction to the case

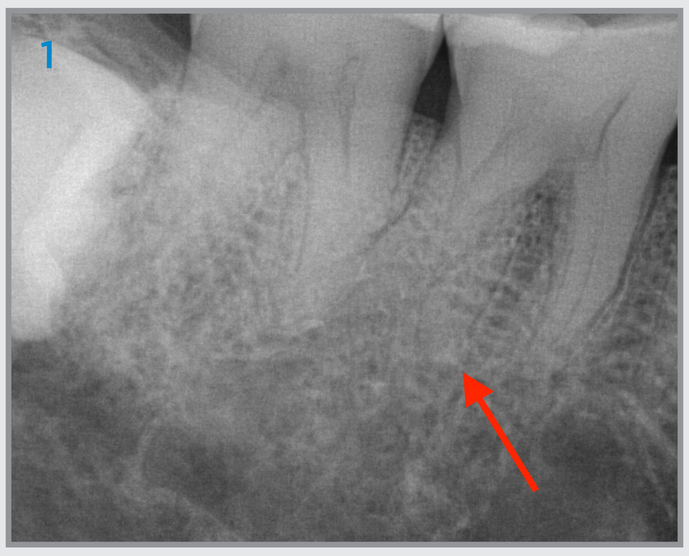
In the situation, tooth/root structure preservation is essential to reduce the risk of ledging, transportation, zipping, perforation, and root fracture. Case selection, diagnosis, and pre-treatment planning are important. Endodontic file selection with flexibility, efficiency, and respect of natural root anatomy is critical.

The patient was presented with irreversible pulpitis on tooth 46. From the pre-op radiograph, tooth 46 is presented with an additional distal root (Radix Entromolaris tooth morphology). A CBCT scan has confirmed the presence of DL root with severe root curvature. A careful file selection is critical for this delicate DB root.

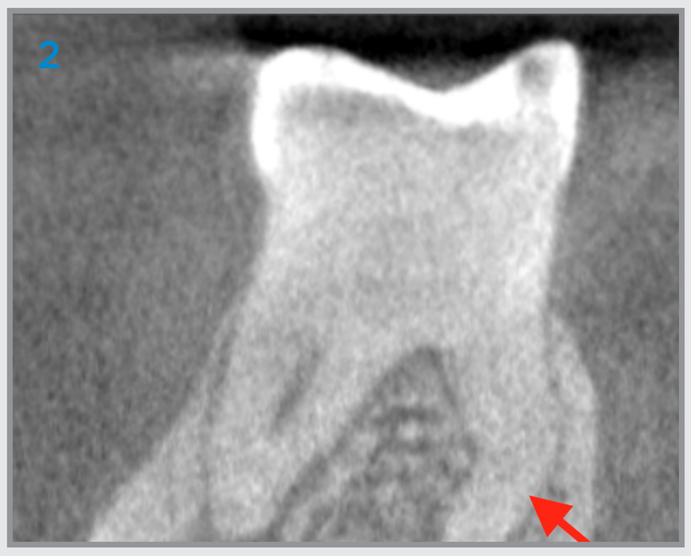


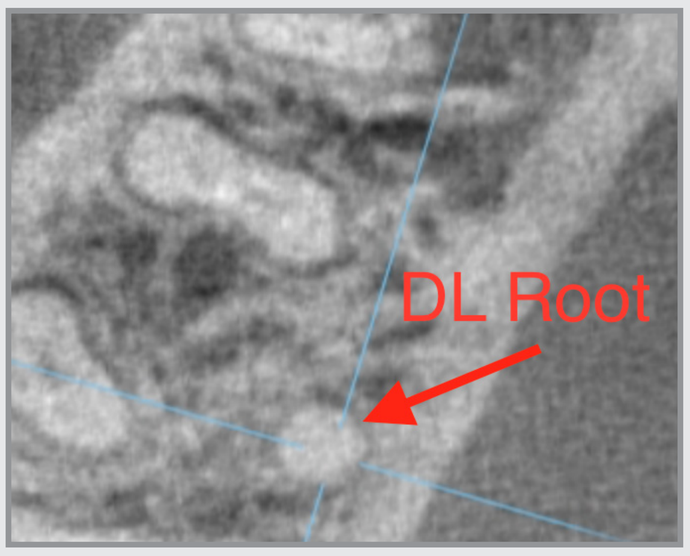


Treatment steps

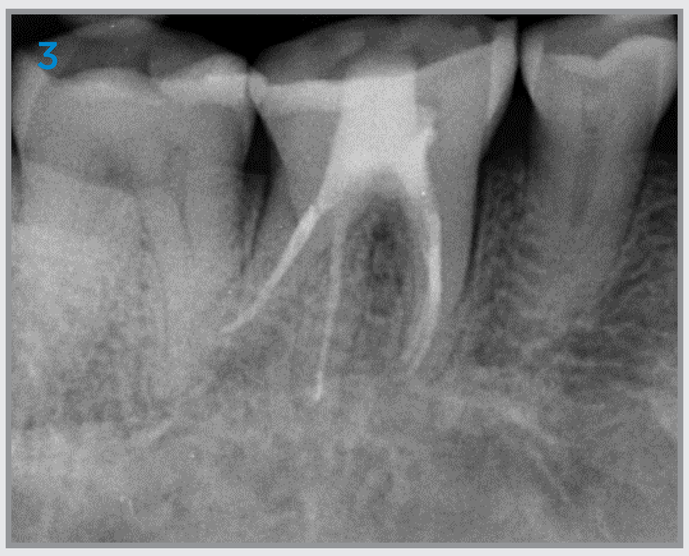


Tooth has an addition distal root (Radix Entromolaris)





The CBCT scan has confirmed the DL root with small diameter and appeared to be calcified.



Conservative Endo Cavity (CES) was prepared, all canals were negoticated, glide path established, and the DL canal was prepared to TruNatomy Small, others with TruNatomy Prime.

Material and Method

TruNatomy Small file preparation for the DL canal and others were prepared to TruNatomy Prime. Obturation with GP coated with AH Plus. Coronal seal with Fuji 7 White using extension tip and Fuji Bulk in the access cavity.

Discussion and Conclusion

The DL canal has a sharp angle at the canal orifice and a second curvature at the apical 1/3. Establish a smooth glide with hand file follow with the TruNatomy Glider is the key to success.

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