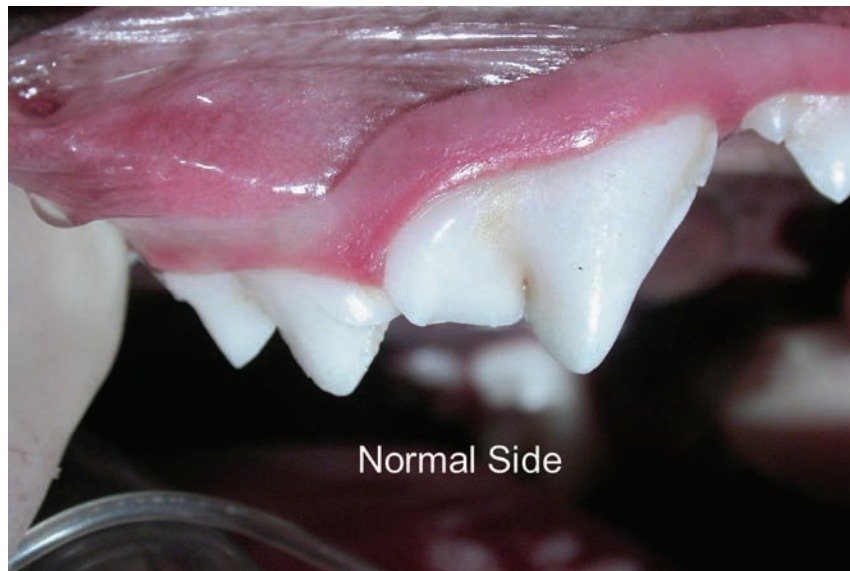


CASE OF THE MONTH **(September 2011)**

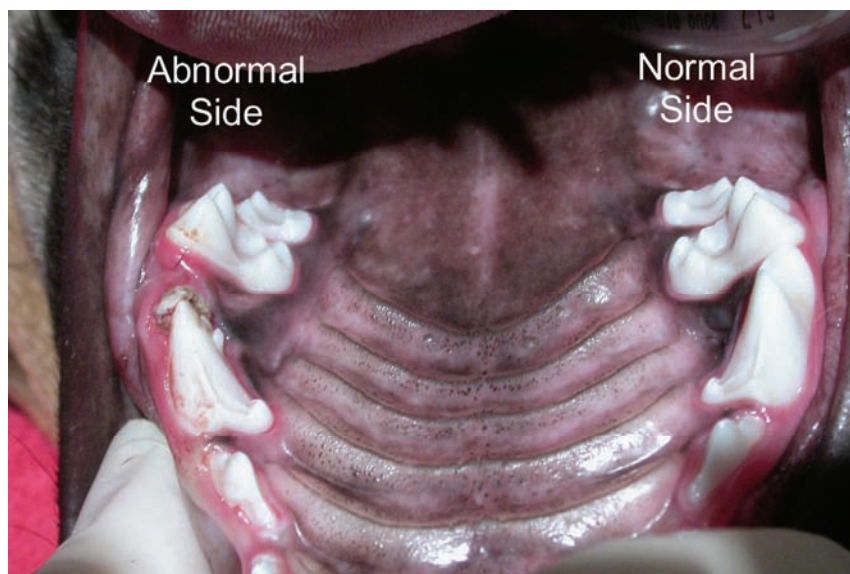
Signalment and History: A five month old spayed female Rhodesian Ridgeback was referred for evaluation and treatment of an abnormal left maxillary 4th premolar. A large portion of this tooth was covered with gingival tissue, although at this age, this tooth should have been fully erupted.



Procedures: We placed the patient under general anesthesia for a complete oral exam and intraoral radiographs. At this point we were able to closely evaluate the appearance of this tooth. The surface of the crown was roughened and irregular, especially the distal cusp. There was a large gingival interdental space between this tooth and the 1st molar. Normally, these teeth are much closer together.

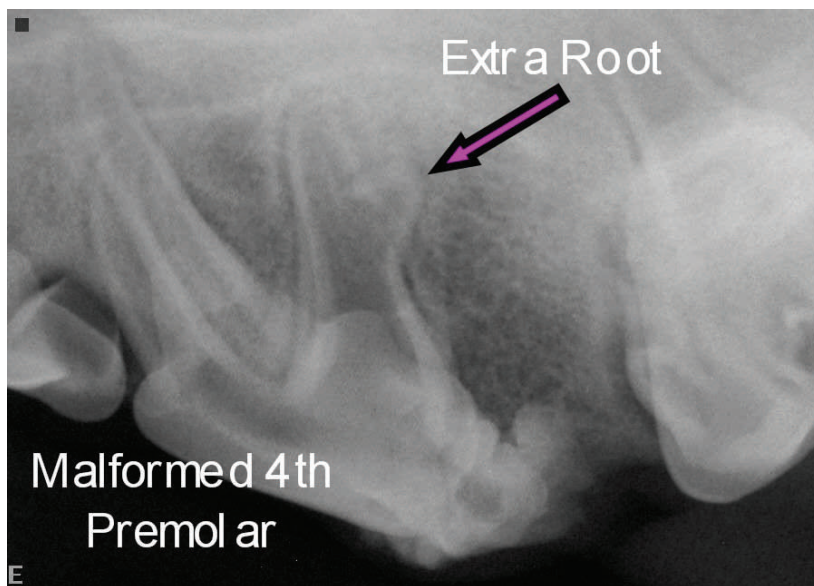


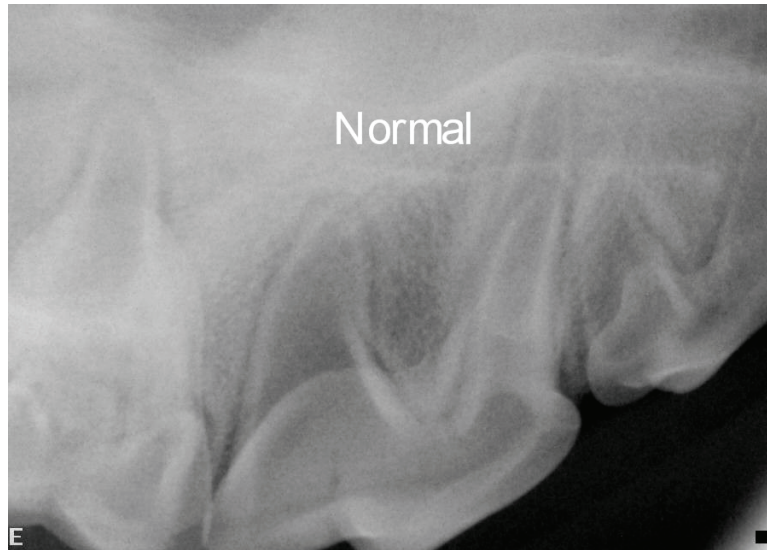
The palatal view was also revealing.



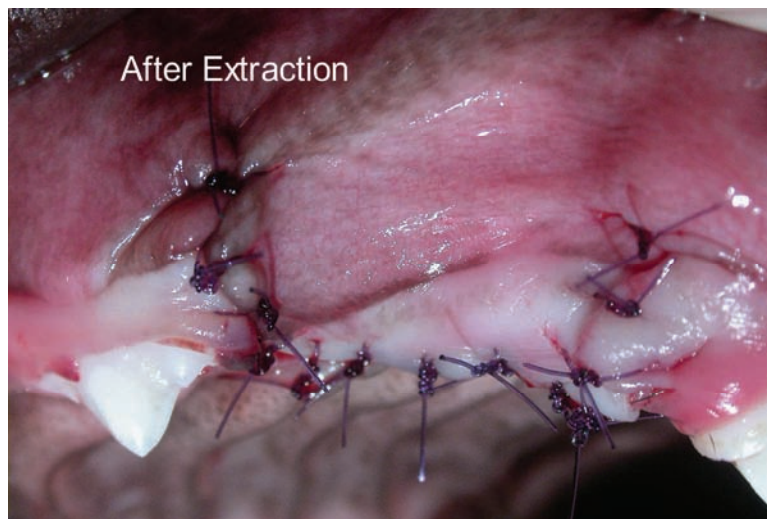


Intraoral radiographs were taken of this tooth and also the contralateral normal tooth for comparison.

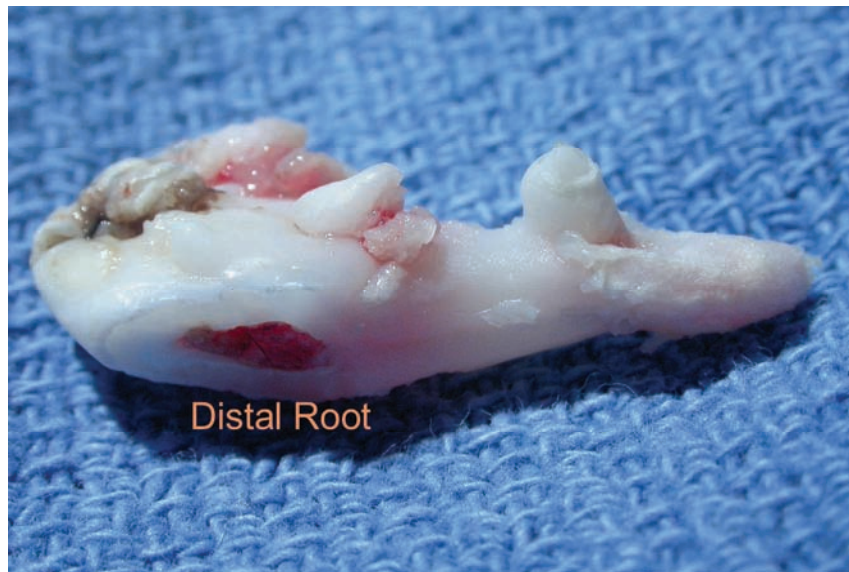




The distal root of the abnormal tooth displayed a small supernumerary root on its distal surface, complete with root canal and periodontal ligament space. We elected to surgically extract this tooth and closed the extraction site with a simple interrupted pattern of 4-0 Monocryl.



After extraction, we found that the distal root actually possessed two rudimentary supernumerary roots.



Discussion: When I initially examined this patient in the exam room while awake, my first impression was that for some reason, this tooth had failed to completely erupt through the gingival tissue. After our exam and radiographs under general anesthesia, however, it soon became evident that we were dealing with a tooth that had suffered an anomalous development.

The roughness and irregularity of the distal cusp of the crown gave this tooth a guarded prognosis. There was no enamel present, and a large area of exposed dentinal tubules provided bacteria with an easy access to invasion of the pulp of this tooth.

Developmental defects may occur as a result of genetics, systemic disease with a high fever, or trauma to the developing tooth bud. In most cases,

defects arising from genetic constitution or systemic disease will be more widely distributed throughout the oral cavity rather than being confined to one or two teeth. In this case the most likely cause is trauma to the affected area of the mouth while the tooth bud for the 4th premolar was still developing beneath the gingiva.

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