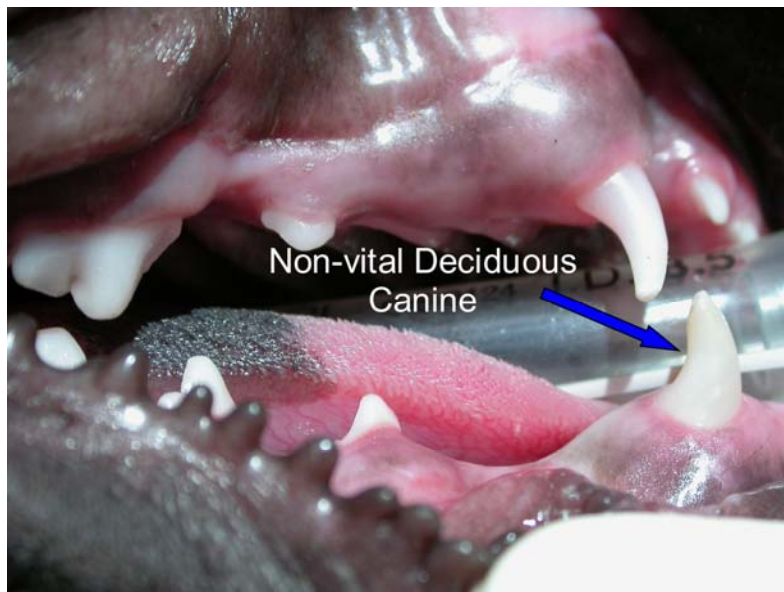


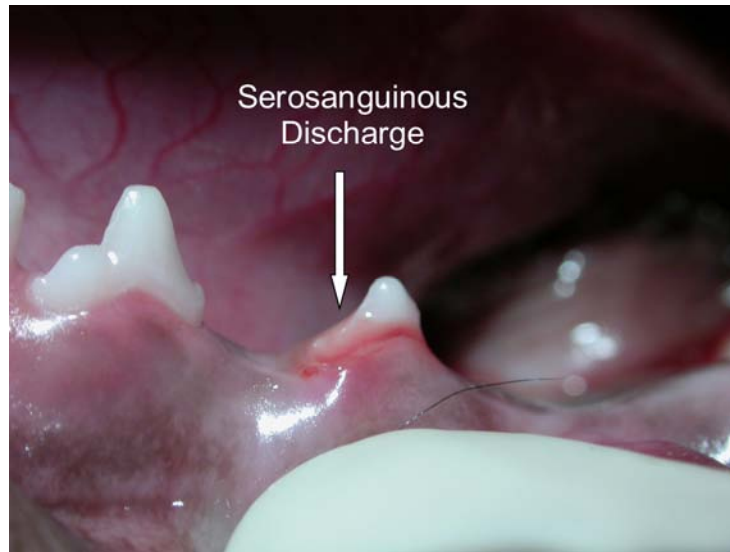
CASE OF THE MONTH (November 2009)

Signalment and History:

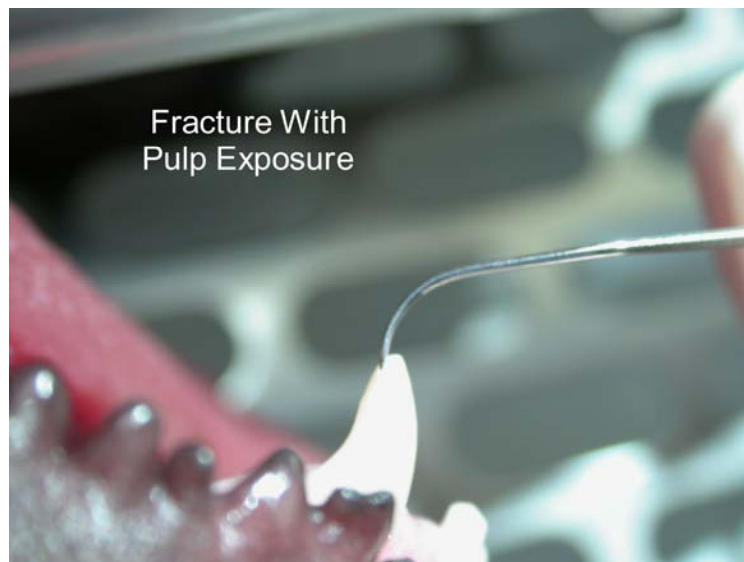
A 12 week old male Leonberger was referred for a right mandibular swelling which had occurred one day after the administration of a series of vaccinations. Two weeks prior the patient had been shipped in a crate from Switzerland on a 16 hour flight. Upon examination we found that the right mandibular deciduous canine tooth appeared to be discolored and non-vital and a serosanguinous discharge was seeping from the gingival margin next to the deciduous second premolar.

Procedures: The patient was placed under general anesthesia for a complete oral examination and radiographic evaluation.

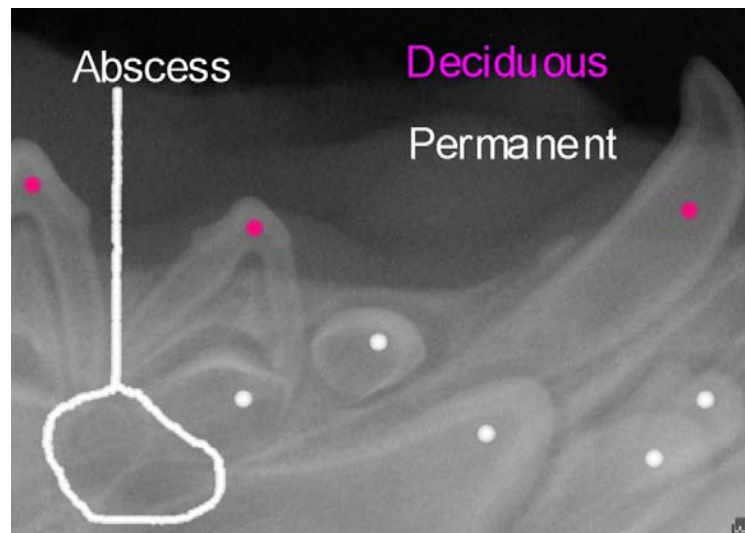




We discovered that the deciduous canine tooth had a fracture with pulp exposure.



Intraoral radiographs revealed a radiolucent area near the base of the tooth buds destined to become the permanent canine and the second premolar. This lucency was undoubtedly associated with the pulp exposure of the deciduous canine and the subsequent influx of bacteria into the surrounding mandibular bone.



The fractured deciduous canine tooth was surgically extracted.



This patient presented again eight months later with an enamel defect on the right mandibular permanent canine tooth. A treatment plan was created to prepare and restore the enamel defect with a composite restoration.



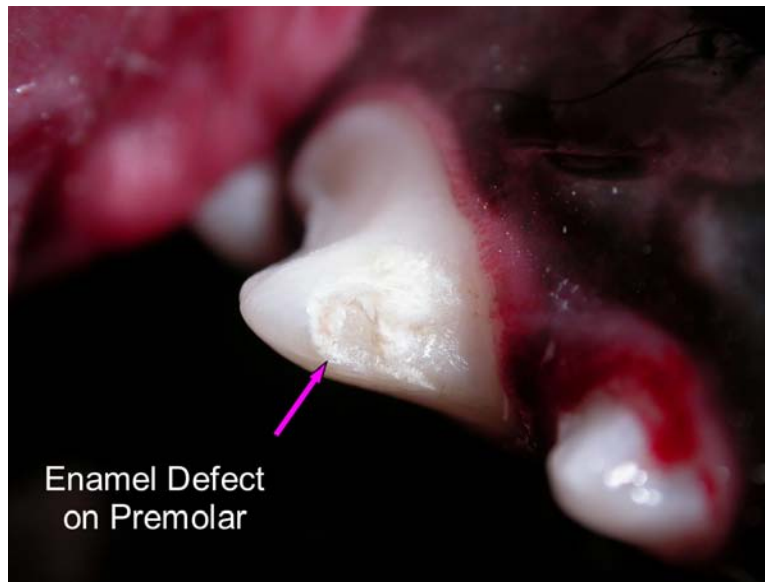
A white stone on a highspeed handpiece was used for cavity preparation and the composite was placed into the cavity prep.



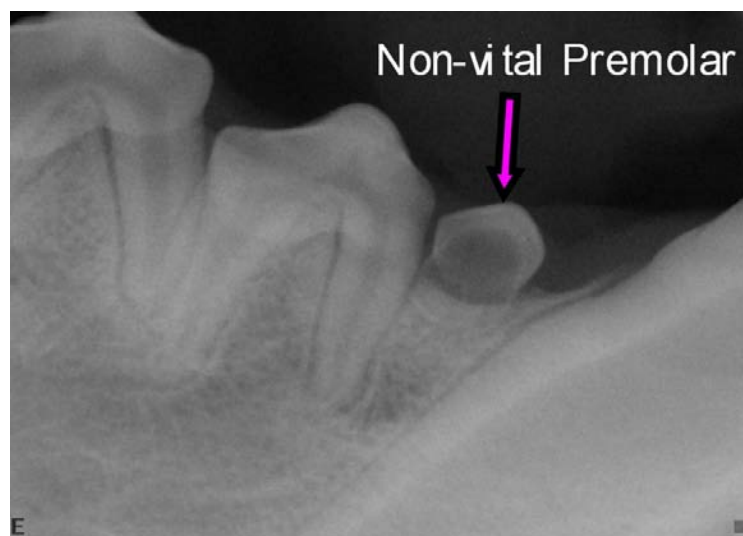
The composite was smoothed with finishing disks and the restoration completed.



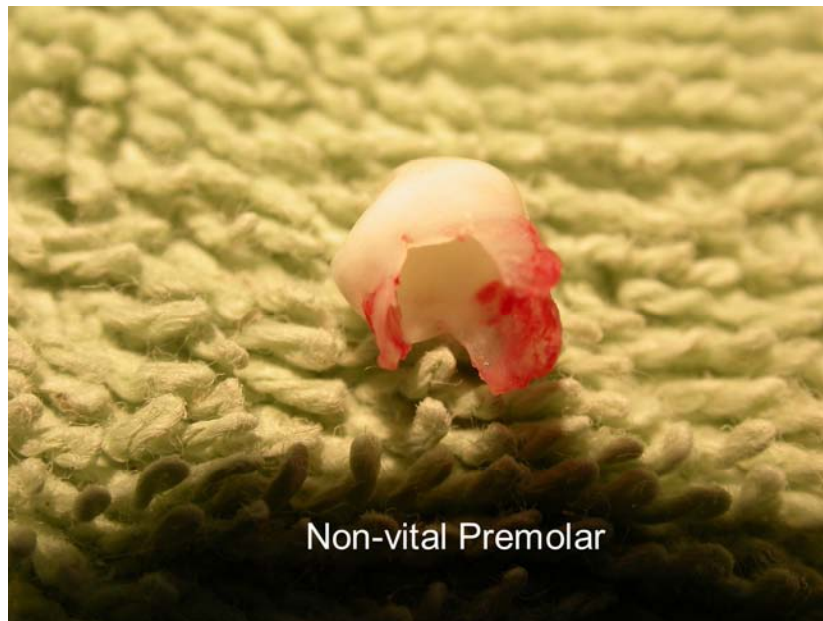
Another enamel defect was identified on the lingual surface of the second premolar.



The second premolar was radiographed to be sure there was no endodontic involvement prior to bonding this tooth. This radiograph also showed a non-vital first premolar with large root canal, thin dentinal walls and a wide open apex.



The second premolar was bonded and the first premolar was extracted. When extracted, the first premolar closely resembled its radiographic image.



Discussion: The importance of treating fractured deciduous teeth cannot be overemphasized and this case is a good example. The pulp exposure of the deciduous canine tooth was responsible for the initial mandibular swelling and serosanguinous discharge associated with the deciduous second premolar. It also eventually led to pathological involvement of the permanent tooth buds resulting in enamel hypoplasia of two teeth and arrested development in another. Any damage that occurs to the developing tooth buds, whether it be traumatic or infectious in origin, can result in defects that may not become apparent until months later when these permanent teeth erupt into the oral cavity.

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