

## **CASE OF THE MONTH (January 2009)**

### **Signalment and History:**

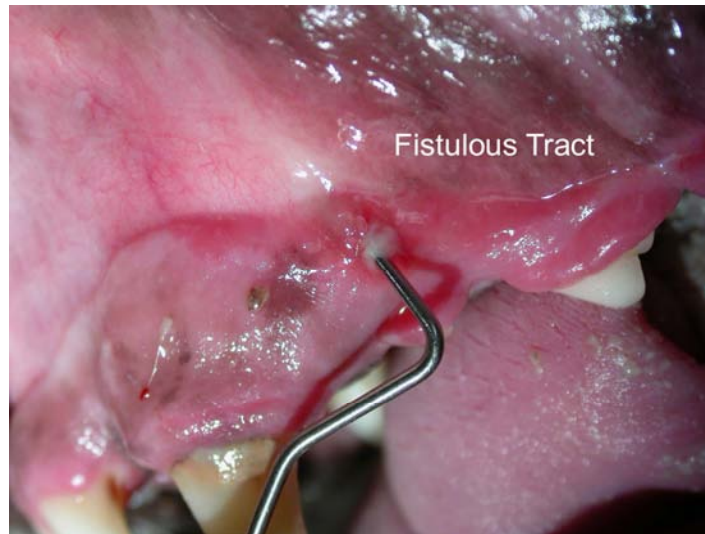
An 11 year old spayed female Golden Retriever was referred for pain related to the left rostral maxilla. When the owner touched this area, the patient would wince and whine in pain.

### **Procedures:**

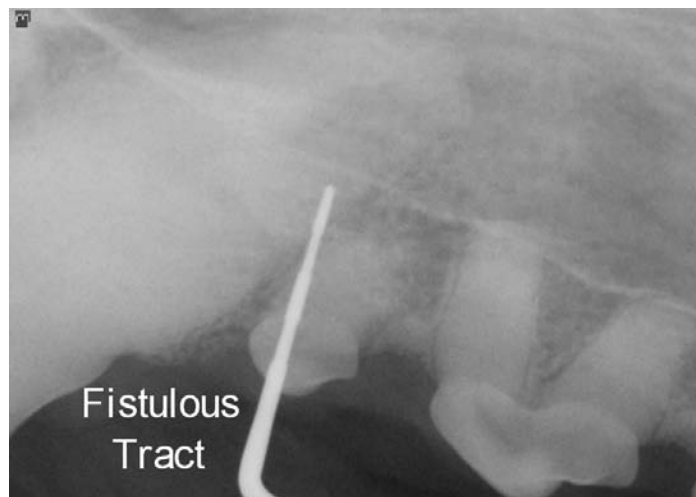
We placed the patient under general anesthesia for a complete oral exam to identify the source of this pain. Two significant findings were soon evident. First was a fracture of the left maxillary canine tooth with pulp exposure.



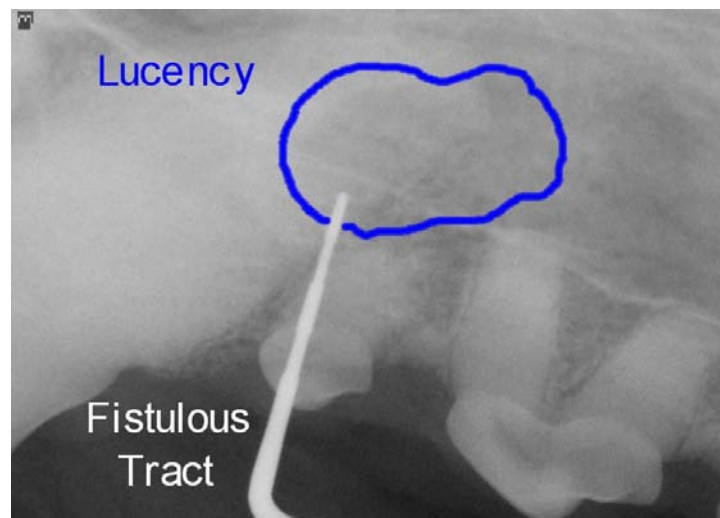
Second, a periodontal probe was used to locate a draining fistulous tract directly apical to the first premolar.



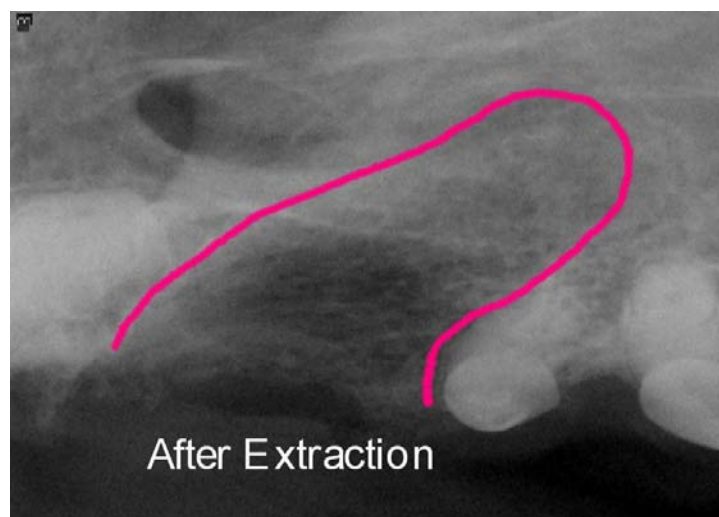
Next an intraoral radiograph was taken with the probe in place to locate the origin of the fistula.

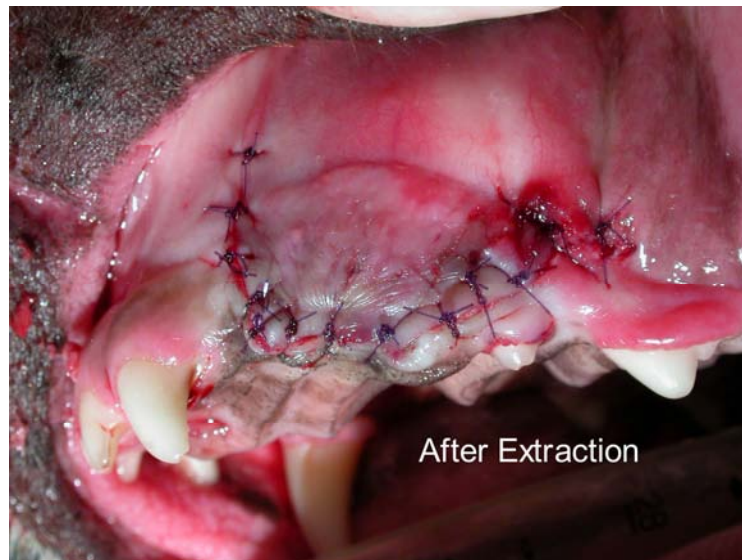
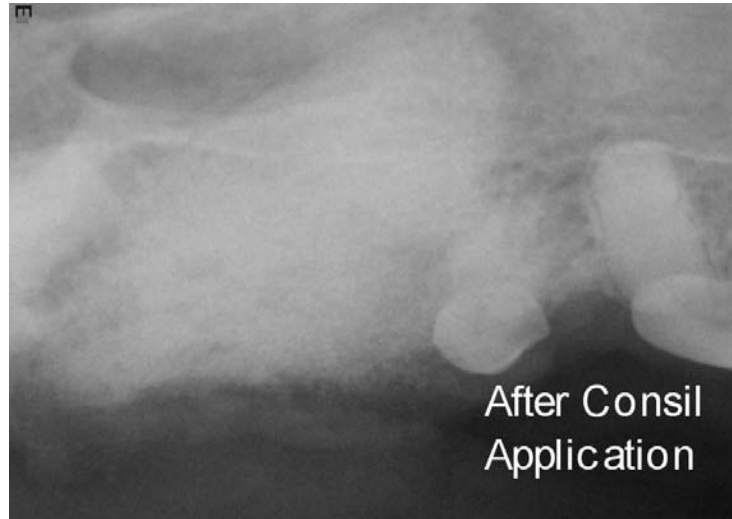


This radiograph indicated that the origin of the fistula was located at the apex of the maxillary canine tooth. It also revealed a lucency in the peri-apical region and it appeared that the apex of the root itself was involved in this lytic process.



A decision was made to surgically extract this tooth. After extraction, the large empty alveolus was filled with Consil, an osseoconductive product, to help maintain the normal shape of the maxilla.



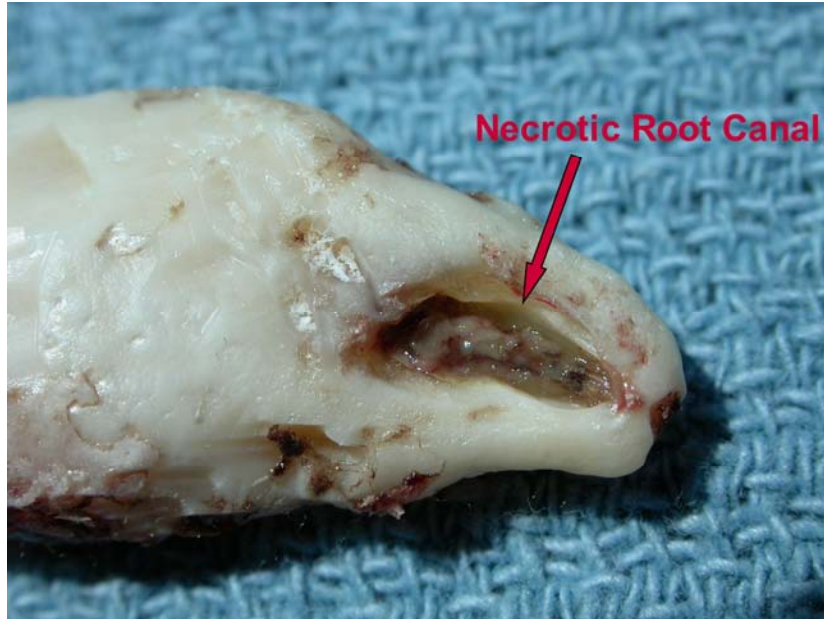


**Discussion:** When initially examining this patient a draining fistula was found immediately apical to the maxillary first premolar. This might lead one to believe that a diseased first premolar was the source of this fistula. When a fistulous tract is found in the gingiva, it is always important to place a probe or other radiopaque device (such as gutta percha) into the fistula and take an intraoral radiograph. This is essential to determine the origin of the infectious process.

It is also important to remember just how far caudally the root of the canine tooth extends. As you can see from the radiographs, the apex of the canine root lies nearly directly above the mesial root of the second premolar.

You may ask why we did not consider performing a root canal procedure in an attempt to save this canine tooth. After all, the two options for a fractured tooth with a pulp exposure are either root canal or extraction. On the initial radiograph we could see what appeared to be a resorptive process that was destroying the apex of the canine tooth. In order to perform root canal therapy it is necessary to have a solidly closed apex to mechanically hold the root canal filling materials in place. Photos of the extracted tooth illustrate that we made the correct decision.





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