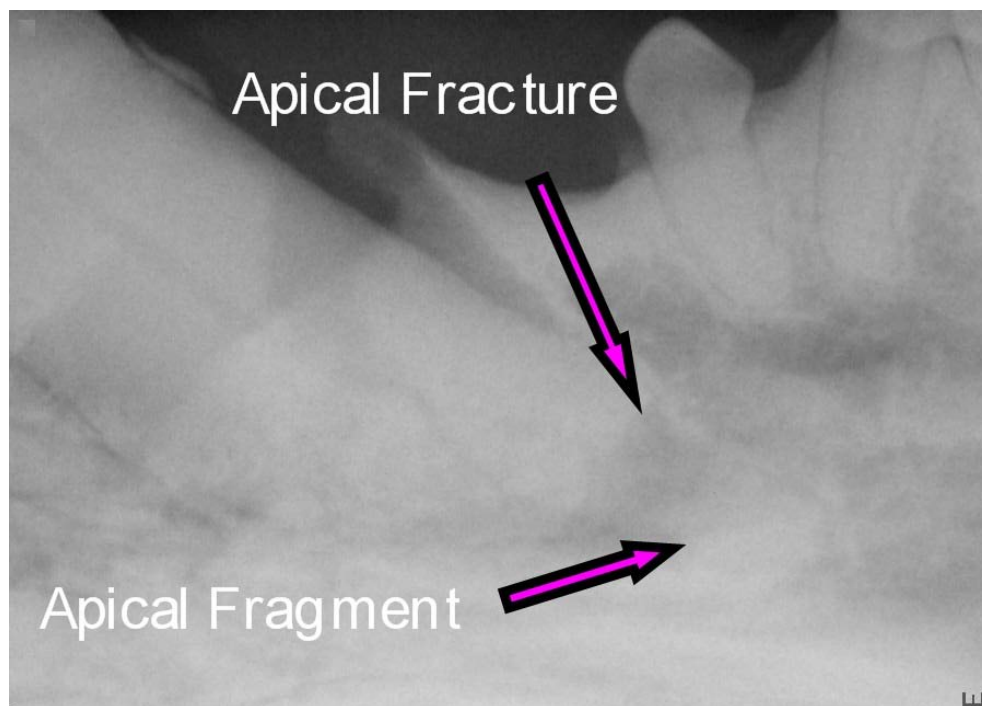


CASE OF THE MONTH (August 2008)

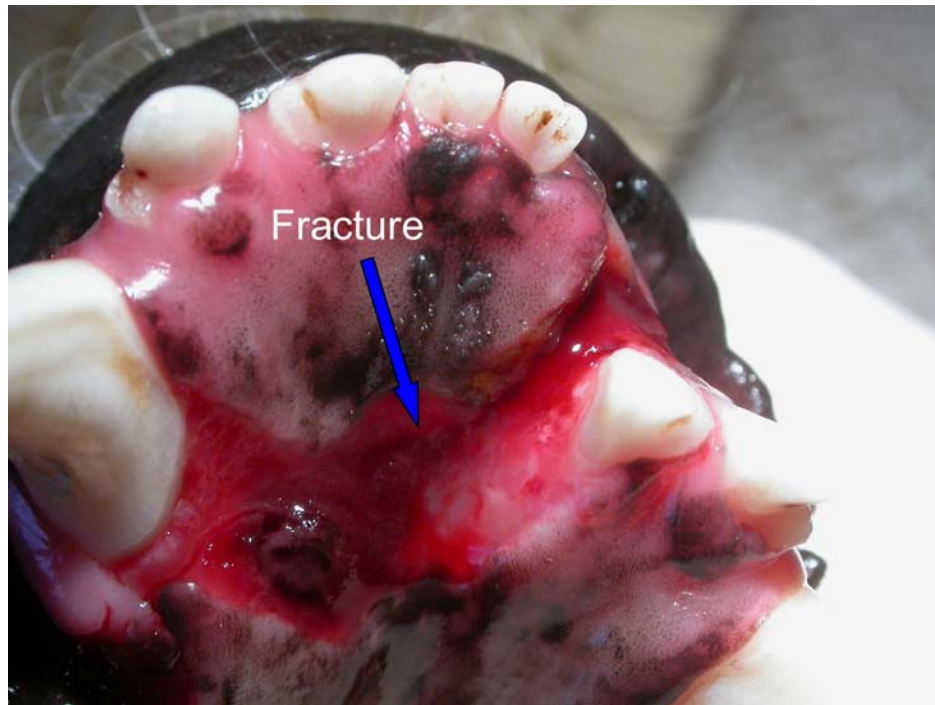
Signalment and History: A four year old neutered male Labradoodle was referred for evaluation and treatment of oral trauma resulting from a fence biting incident at a boarding kennel. The patient had suffered a fracture of the left rostral mandible through the area of the mandibular incisors and left mandibular canine tooth. The referring hospital had taken radiographs of the affected area and sent the images to a radiology consulting group for evaluation. The report described the fracture line traveling through the alveolar bone associated with the incisors and canine tooth and stated that the fracture did not involve the tooth itself.



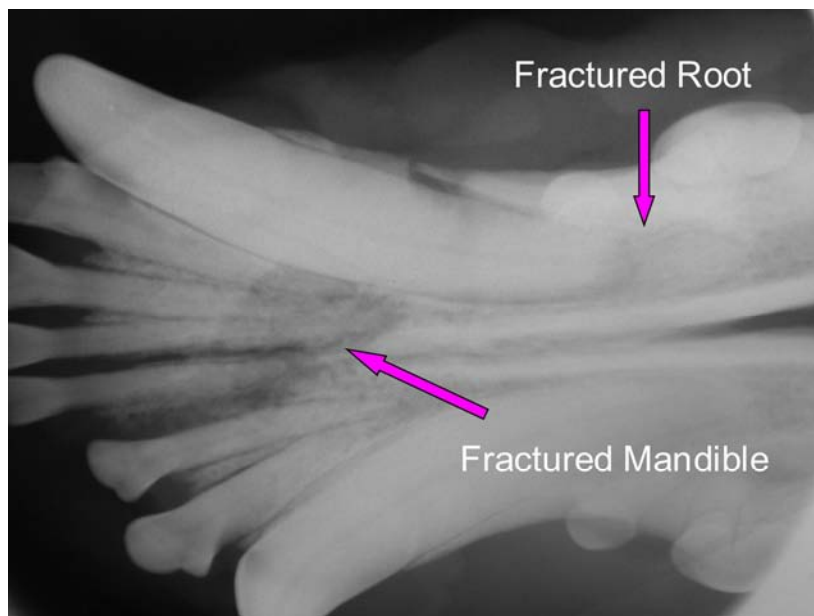
Procedures: The patient was placed under general anesthesia for a complete oral exam and more intraoral radiographs. One of the images from the referring hospital showed an area that was suspicious of a fracture of the apex of the mandibular canine tooth and our plan was to evaluate it more definitively.



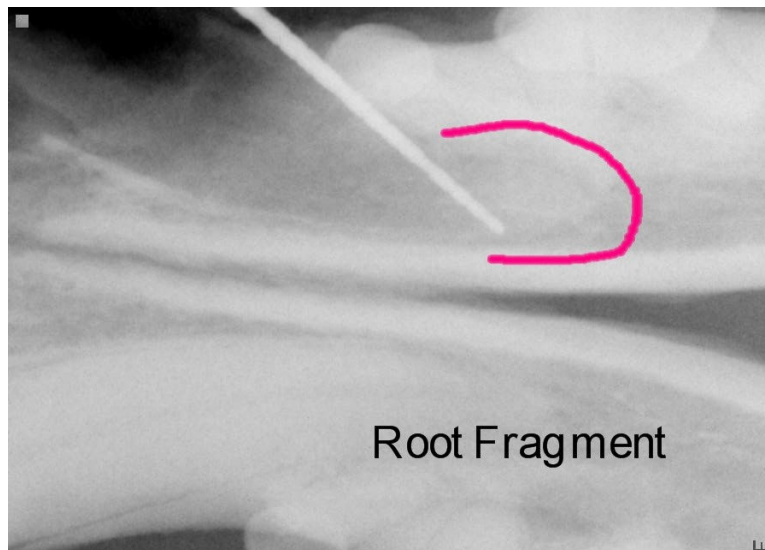
Our oral examination demonstrated a fracture beginning between the right 1st and 2nd incisors and traveling disto-lingually across the mandibular symphysis and into the area of the root of the left canine. The large fragment of alveolar bone holding the left canine and incisors and the right 1st incisor was displaced in a rostral direction.

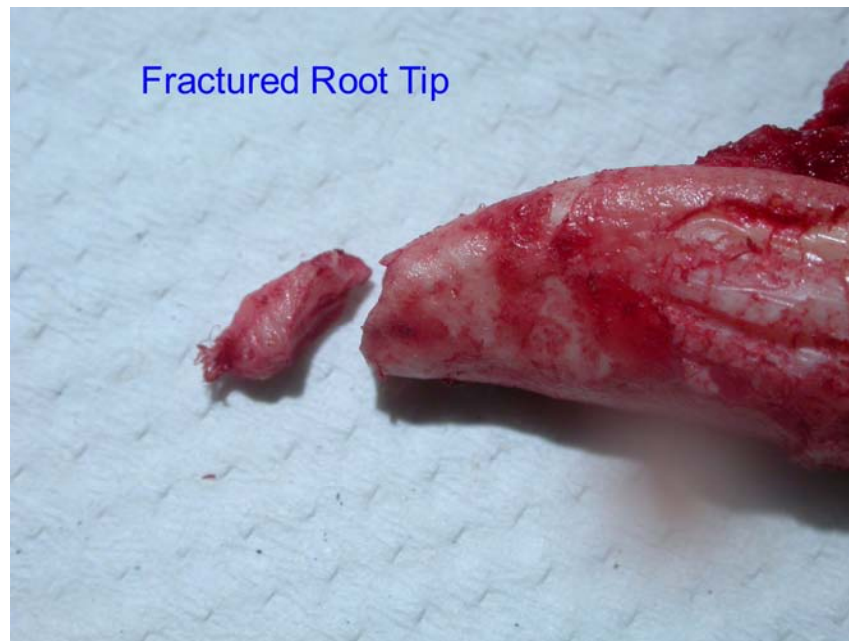


Further intraoral radiographs demonstrated that the fracture did indeed involve the apex of the canine tooth.



A decision was made to extract the involved teeth and remove the fragments of alveolar bone supporting these teeth. In essence, a partial rostral mandibulectomy was performed. After extraction of the canine tooth it was evident that the apex of the tooth had remained in the alveolus and this was confirmed radiographically. This fragment was then removed and the empty alveolus was filled with Consil, an osseoconductive product. The surgical incision was closed with 4-0 Monocryl. The patient was re-evaluated at one and four weeks postoperatively and was doing very well.





Discussion: Oral fractures present interesting challenges and each one must be evaluated based on its own merits, as no two are alike. Potential treatment options in oral fractures include interdental wiring, intraoral acrylic splinting, and external fixators.

In this case the fracture line traveled obliquely across the apices of the four incisors and across the root of the canine tooth. The canine tooth was luxated, as noted by the very wide space between the alveolar bone and the canine root, easily seen in the first radiograph. In addition, the apical region of the canine was fractured and displaced. All of these teeth suffered damage to their apical blood supply and as a result, all would soon become non-vital.

Treatment options for non-vital teeth are twofold: extraction or root canal therapy. The owner elected extraction in this case. These teeth make up the vast majority of the mass of the rostral mandible, and after extracting the involved teeth, there was very little bone tissue remaining. Rather than at-

tempt to repair this thin, fragile portion of the mandible, we elected to remove it. This treatment yielded a very cosmetic and functional outcome and a happy patient and client.

COMMUNITY ANIMAL HOSPITAL

John A. Koehm, D.V.M., F.A.V.D.

Fellow of the Academy of Veterinary Dentistry

4871 Summit Ridge Drive

Reno, NV 89523

(775)-746-0333