

Case of the Month June 2009

Presentation– Fudge is a 2yr MN dachshund. The dog broke his left maxillary 4th premolar chewing on a bone. The owner said the dog was eating well and doesn't seem to be too bothered by the broken tooth. The fracture probably occurred about 1 week before presentation.

Oral Exam– The oral exam showed a complicated crown-root fracture of the 4th premolar. The fractured slab was still attached to the gingiva and the exposed pulp was visible at the fractured cusp. There were no current periodontal problems associated with the tooth.

Treatment- A full-thickness buccal gingival flap was created to determine the extent of the subgingival fracture and to remove the fractured piece of tooth. After removal of the loose segment, the rough subgingival root surface was polished with discs to get the surface very smooth to minimize plaque attachment and to allow the reattachment of the gingiva. The flap was sutured back in place.

Next, root canal therapy was performed. Access holes were made in the tooth and the pulp chamber was sterilized and filled with a sealant material. A composite material was placed in the access holes, the tooth was prepped for a metal crown and impressions of the tooth were created to be submitted to the laboratory. After the crown was created, it was cemented to the tooth.

Discussion- There seems to be a misunderstanding about subgingival slab fractures that they always need to be extracted. There are often ways to save these strategic teeth. It is important to give your client other options besides extraction. Intraoral dental radiographs and a good periodontal exam are mandatory before any treatment is performed, including extraction.



The arrows outline the barely visible



Photo of the tooth after suturing the flap



Final radiograph taken after completion of root canal therapy.



Photo taken prior to cementing the metal crown.



The metal crown was cemented to the