

Root Canal Therapy in a German Shepherd Dog

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A 5 ½ year-old male German Shepherd dog was presented to the Dentistry Department of a veterinary referral center in November 2010 for evaluation of multiple fractured teeth. The dog was actively being trained in bite work, and therefore needed appropriate treatment to preserve its teeth and their function. The patient had no significant historical health concerns.

A general physical examination revealed an apparently healthy dog. An oral exam revealed four fractured teeth with pulp exposure (#104, 202, 204, and 404), marked abrasion in a cage-biting pattern on tooth #304, and abrasion of several other teeth due to aggressive bite work (#101-103, 201-203, 205-208, 301-307, 401-403, 406-408).

The patient was anesthetized for intraoral radiographs, dental charting, and ultrasonic scaling. Intraoral radiographs revealed periapical lucencies at all fractured teeth consistent with endodontic disease. A full restorative dental plan was formulated to take place over the following year and a half. Treatment included root canal therapy on the four fractured teeth (#104, 202, 204, and 404), full stainless steel crowns on two teeth (#204 and 404), and a stainless steel ¾ crown on the tooth with marked abrasion (#304).

With the appropriate root canal therapy, all periapical lesions were resolved at following recheck appointments. Crowns were custom-cast and placed as the final step in this treatment plan in February of 2012. The patient returned to active duty.

This presentation will discuss basic dental anatomy, tooth fractures, endodontic disease, and treatment options for complicated crown fractures in dogs.

References:

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3. van Foreest A, Tijssens M. Adhesively cemented full-cast metal crowns on traumatized canine teeth in working dogs. *Tijdschr Diergeneeskd.* 2007 Mar 1;132(5):156-62. Dutch. PubMed PMID: 17378487.