

Animal Dental Center

2409 Omro Road
Oshkosh, WI 54904
(920)233-8409 or 888-K9-TOOTH
Dr. Dale Kressin DVM, FAVD, DAVDC



Options available for fractured teeth

Fractured teeth are usually caused by either trauma to the head and mouth or from pets chewing on hard objects such as bones. Often fractured teeth go unnoticed by the owners unless they observe the injury causing the fracture. Veterinarians and technicians often find fractured teeth when performing oral examinations and dental treatment.

In order to determine the best treatment for fractured teeth, physical and radiographic evaluations are essential. Limited physical examinations can be done in the exam room while more thorough evaluations must be performed while the patient is anesthetized.

Once the patient is anesthetized, physical evaluation can be performed on the fractured teeth using a dental explorer, transillumination (directing a small concentrated light source on a tooth), and a periodontal probe.

A fine pointed dental explorer is used to probe the dental tissues for loose fragments, cracks, multiple fracture planes, separation between enamel and dentin and open, exposed pulp chambers or pulp canals. A periodontal probe is used for exploring the extent of slab fractures that extend below the gum line. Transillumination can help reveal vertical fractures as well as determine tooth vitality. A vital tooth will have a translucent appearance while a non-vital tooth will appear opaque.

In order to complete the evaluation process, dental radiographs of the fractured tooth as well as the contra-lateral tooth should be taken.

A simple crown fracture involving only the enamel requires smoothing the enamel (odontoplasty) with a fine diamond bur in a water-cooled high-speed hand piece.

Crown fractures involving enamel and dentin without pulp exposure can be restored using dental adhesives or sealants, and composites. After the tooth is smoothed and the enamel beveled, the fractured tooth is cleaned, polished with flour of pumice, acid etched and treated with a dental adhesive or sealant. A composite filling material can then be placed over the fracture to restore the tooth.

If the fractured tooth has signs of a near pulp exposure (pink spot in the dentin over the area of the pulp chamber) it should be treated prior to restoring the tooth. Once the near pulp exposure is treated, the fractured tooth can be restored as described previously.



Fractured tooth

Radiographic
evaluation:
No peri-apical
pathology



Restored tooth



Providing T.L.C through dental & oral surgical care

Animal Dental Center

2409 Omro Road

Oshkosh, WI 54904

(920)233-8409 or 888-K9-TOOTH

Dr. Dale Kressin DVM, FAVD, DAVDC



If the vital pulp is exposed, performing a partial pulpectomy and medicating the pulp (pulp capping) may be an option. It is recommended that a partial pulpectomy and pulp cap be performed only in recent exposures (24-48 hours since exposure in a mature dog, or up to 2 weeks exposure in a dog less than 18 months of age). After performing a partial pulpectomy and pulp cap, the tooth is restored with adhesives and composites as described above. If the fractured tooth with pulp exposure does not meet the criteria for partial pulpectomy and pulp capping then root canal therapy is indicated before restoring the fractured tooth.

A fractured tooth with a non-vital pulp usually presents as a crown or crown-root fracture and black (necrotic) pulp. This type of fracture can be treated with root canal therapy followed by restorative treatment with adhesives and composites or metal crowns.

If a client declines treatment of a fractured tooth with pulp exposure, then an extraction must be encouraged. Ignoring a tooth with pulp exposure is not an option because it is painful for the patient. Additionally, pulp exposure guarantees an infection that may spread systemically.

Sincerely,

Dale Kressin D.V.M

Dale Kressin DVM, FAVD, Dipl. AVDC



Providing T.L.C through dental & oral surgical care.