



Basic knowledge of dental trauma

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Dental fractures are a frequently encountered pathologic finding when a proper dental examination is performed. The overall prevalence of dentoalveolar injuries (DAI) is 26% (Soukup *et al*, 2015). When considering patients with maxillofacial trauma the amount of patients suffering at least 1 DAI is 72%, of which 63% of the animals is younger than 3 years (Soukup *et al*, 2013). These numbers highlight the importance of a basic knowledge of the nature and treatment possibilities when dental trauma has occurred. Some knowledge of tooth development is necessary to understand why certain fractures need certain treatments. For instance treatment of a tooth fracture in a 6 month old dog may be different from the treatment of a fracture at the same level of the tooth in a 10 year old dog, due to tooth development. The coronal part of a tooth is shaped and developed mainly before eruption, though further development does not stop once a tooth has erupted. When considering the root, about two-thirds has been formed before eruption, but a big part of the root will develop after the tooth has erupted through the gingiva. In younger animals the pulp cavity is proportional larger than in older animals, due to ongoing tooth development during the animals life. Younger animals are more likely to suffer from a tooth fracture than older animals (Soukup *et al*, 2013), meaning that potentially more younger teeth need treatment. A tooth fracture may be either uncomplicated or complicated when evaluating whether a visible entrance to the pulp cavity is the result of the fracture (complicated) or not (uncomplicated). The presentation will cover the above topics next to the basic treatment considerations in patients that present with a tooth fracture.



Fig: Complicated crown fracture of the right maxillary canine tooth

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