Unerupted Teeth in Dogs & Cats

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In the Literature

Babbitt SG, Volker MK, Luskin IR. Incidence of radiographic cystic lesions associated with unerupted teeth in dogs. *J Vet Dent*. 2016;33(4):226-233.

FROM THE PAGE ...

If a missing tooth is encountered during a canine or feline oral examination in which the patient is awake, the tooth may be congenitally missing; may have been previously lost, fractured (with possible retained roots), or extracted; or may be unerupted (ie, either impacted or embedded beneath the gum line).

Definitive diagnosis requires dental radiography to determine the status of the tooth. If the tooth is unerupted, there is potential for cyst development, and extraction of the unerupted tooth is recommended.

In this study, the investigators sought to determine the incidence of oral cyst formation secondary to unerupted teeth. Cases were evaluated over a 3-year period; less than one-third of 213 unerupted teeth (29.1%) had radiographic evidence of cyst formation. The mandibular first premolar and mandibular/maxillary canine teeth are those most commonly reported missing and associated with cystic lesions.[1,2]

Dentigerous cysts form secondary to accumulation of fluid between the crown and the dental follicle, a protective layer of soft tissue that covers the enamel of an unerupted tooth. The dental follicle is usually shed during normal eruption. If the tooth does not erupt, developmental or inflammatory factors can stimulate cyst formation. Although other types of cysts can occur, dentigerous cysts were most commonly identified (71.4%). Overrepresented breeds, which accounted for 85% of cases with a histopathologic diagnosis of dentigerous cysts, included boxers, pugs, shih tzus, and Boston terriers.

... TO YOUR PATIENTS

Key pearls to put into practice:

1. Awake oral examinations, with evaluation for missing teeth, should be conducted in all patients. Careful attention should be paid to missing lower first premolars, particularly in brachycephalic animals.
2. If the tooth is missing, dental radiography is recommended to confirm whether the tooth is missing or unerupted. In young patients with missing teeth, dental radiographs should be obtained at the time of spaying or neutering.
3. If the tooth is unerupted, extraction to prevent future cyst formation is recommended.
4. If the tooth is unerupted and a cyst is present, extraction of the tooth and cyst lining, followed by histopathology to confirm a dentigerous cyst, is recommended.
5. Referral to a veterinary dental specialist is recommended for advanced cases with significant bone destruction, multiple teeth involvement, and/or potential for pathologic jaw fractures.

References

1. D'Astous J. An overview of dentigerous cysts in dogs and cats. *Can Vet J*. 2011;52(8):905-907.
2. Verstraete FMJ, Zin BS, Kass PH, Cox DP, Jordan RC. Clinical signs and histopathologic findings in dogs with odontogenic cysts: 41 cases (1995-2010). *J Am Vet Med Assoc*. 2010; 239(11):1470-1476.