

## Pediatric Dentistry

All dogs and cats have deciduous teeth (baby teeth) and permanent teeth (adult teeth). All permanent teeth are usually erupted by 6 months of age.

Intraoral radiograph showing deciduous dentition and adult tooth buds present.

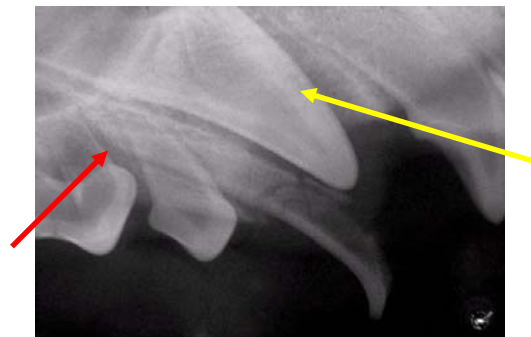


## Fractured deciduous teeth

All fractured deciduous teeth with pulp exposed should be extracted. Pulp exposure is painful and allows bacteria to enter the root canal system and potentially damage the adult tooth bud.



Fractured deciduous right upper canine tooth in a young dog



Radiograph showing the close proximity of the adult tooth bud (yellow arrow) to the root of the deciduous tooth (red arrow)

## Persistent deciduous teeth

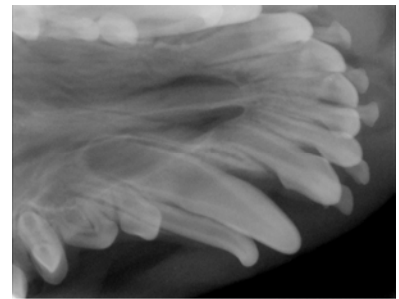
As the permanent tooth erupts, resorption of the deciduous tooth root occurs and the deciduous tooth is exfoliated (lost). There should not be a deciduous tooth in place once the permanent tooth has erupted. If this occurs the deciduous tooth should be extracted.



Persistent right upper deciduous canine tooth and persistent right lower deciduous canine tooth in a young dog with adult teeth erupted.



All four persistent deciduous canine teeth after extraction. Note the long length of the tooth root relative to the tooth crown.



Multiple persistent deciduous canine teeth and incisor teeth are present in this young dog with all of its adult teeth already erupted. This pup would have made a fortune with the 'dog tooth fairy'! One of the preoperative radiographs obtained is shown above. The persistent right deciduous upper canine tooth and multiple persistent deciduous incisor teeth are visible on this radiograph.

## Interceptive Orthodontics

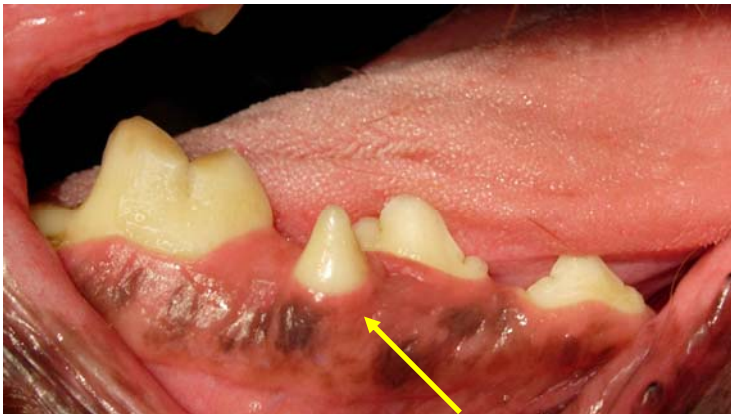
Malocclusions ('bad bites') should be evaluated when puppies and kittens are young, so that necessary treatment may be initiated at an early age. With malocclusions, selective extraction of deciduous teeth may be recommended to allow your dog or cat to achieve its maximum genetic potential for jaw growth.

The persistent deciduous left upper canine tooth is causing displacement of the permanent left upper canine tooth mesially (toward the front) and the persistent deciduous left lower canine tooth is causing displacement of the permanent left lower canine tooth into the roof of the mouth. Extraction of both of these persistent teeth allowed the permanent teeth to move into a normal position.



## Supernumerary Teeth

Sometimes dogs and cats may have more adult teeth than normal. These teeth are referred to as supernumerary teeth. If these teeth are causing crowding of the remaining teeth, thus predisposing them to periodontal disease they should be extracted. If the supernumerary teeth are causing trauma to any of the soft tissues of the mouth they should be extracted.



Supernumerary tooth on the outside of the right lower fourth premolar tooth in a dog. (yellow arrow) Radiograph shows superimposition of that tooth with the distal root of the right lower fourth premolar. (red arrow)

## Missing Teeth

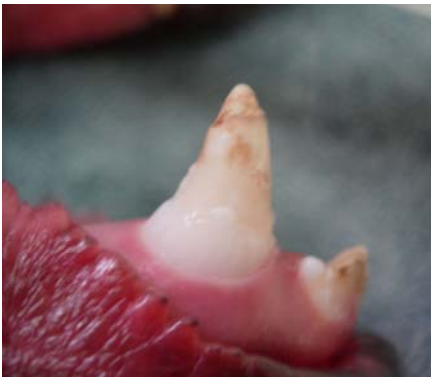
After permanent tooth eruption is complete (usually by 6 months of age for most dogs and cats), your dog should have 42 teeth and your cat should have 30 teeth. If permanent teeth are not present it is important to obtain intraoral radiographs as the tooth may be present underneath the gingival (gum) tissue or embedded in bone or not present at all. Embedded (unerupted) permanent teeth may lead to dentigerous cysts (fluid filled swelling within the bone) and should be extracted.



Missing left upper fourth premolar in a six month old dog.

## Enamel hypoplasia

Enamel hypoplasia is caused by disruption of the cells responsible for enamel development while in the early stages of development. Causes might include infection, nutritional deficiencies certain drugs, and trauma. The resulting uneven layer of enamel leaves the underlying dentinal tubules exposed and may predispose the tooth to infection. The affected teeth should be radiographed to evaluate tooth crown and root development, the rough enamel edges smoothed and dentinal bonding completed.



Lower right canine tooth with areas of soft, discolored enamel, missing enamel and exposed dentin



After treatment including removal of soft, discolored enamel, smoothing the tooth and application of a dentin sealant.