



# BC SPCA

## Dental Reference Guide

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***All photos in this book credited to Dr. Loic Legendre. For more detailed information, see BC SPCA LMS Course: Dental- Physical Exam.***

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# Canine

## Fractures – Complicated



Pulp is exposed. Tooth must be extracted. Not treating will cause pain and lead to infection. Must be treated while in care. May require pain medication or antibiotics while awaiting dental.

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## Fractures – Uncomplicated (Crown Fracture)



The pulp is not exposed. No treatment is necessary.

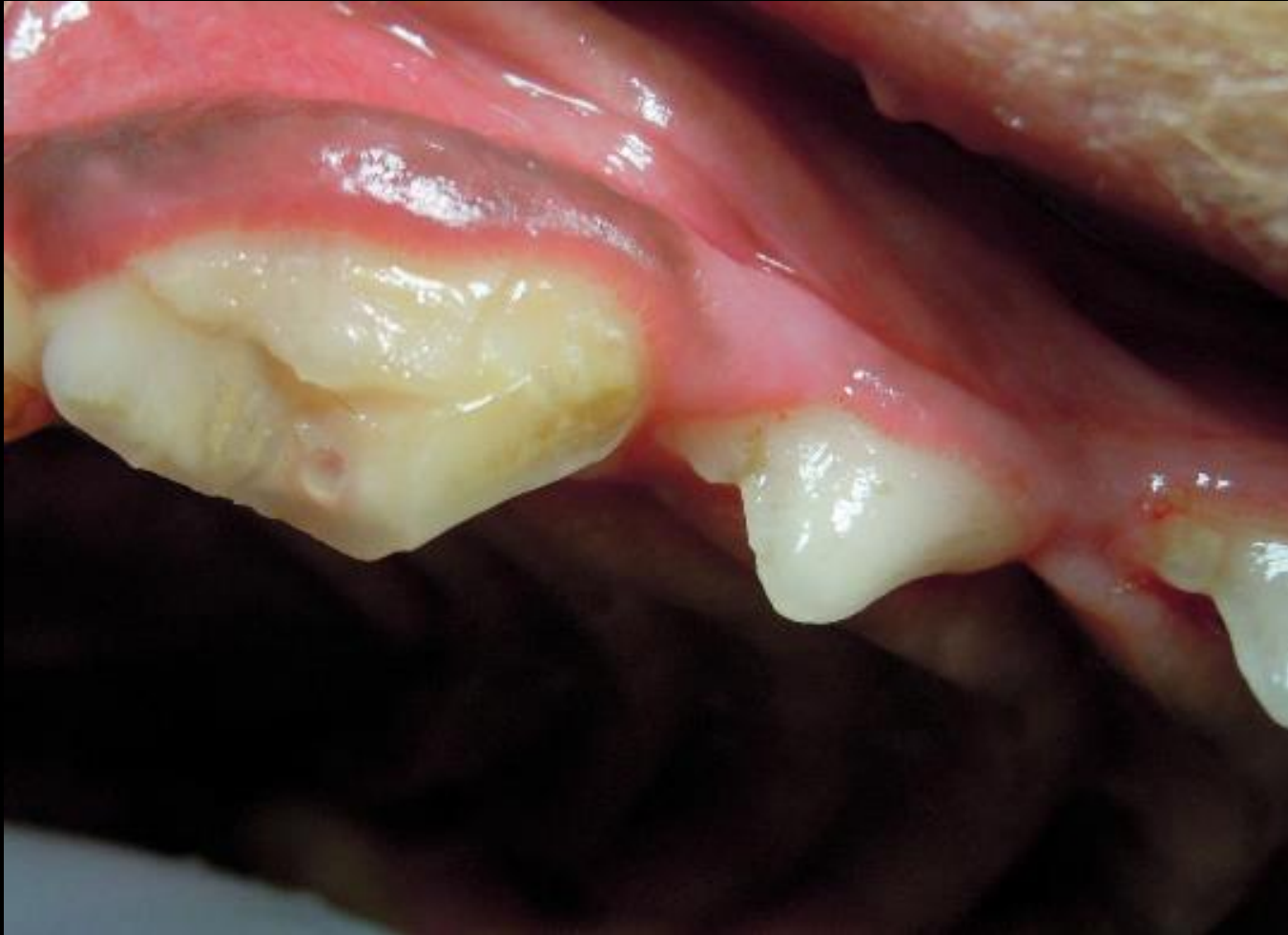
## Slab Fracture (Complicated)



A slice of crown has separated. This photo shows a slab that is removed to reveal pulp exposure. Tooth must be extracted. Not treating will cause pain and lead to infection. Must be treated while in care. May require pain medication or antibiotics while awaiting dental.

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## Slab Fracture (Uncomplicated)



A slab fracture can be uncomplicated, meaning no pulp is exposed. All fractures should be assessed by a DVM.



## Attrition (Worn Teeth)



Can lead to exposure of the pulp, which will cause pain and require extraction of the tooth. Commonly seen in dogs that chew tennis balls or animals with malocclusion causing the teeth to rub together. Must be assessed by a vet to determine if pulp is exposed.

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## Attrition (Pulp Exposure)



On the left you can see the dental tool catching on the surface of the tooth. On the right the black dots indicate pulp exposure. Must be assessed by a vet to determine if pulp is exposed.

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## Attrition (No Pulp Exposure)



No visible black dots, rather smooth brown surfaces which denotes a reparative process. Must be assessed by a vet to determine if pulp is exposed.



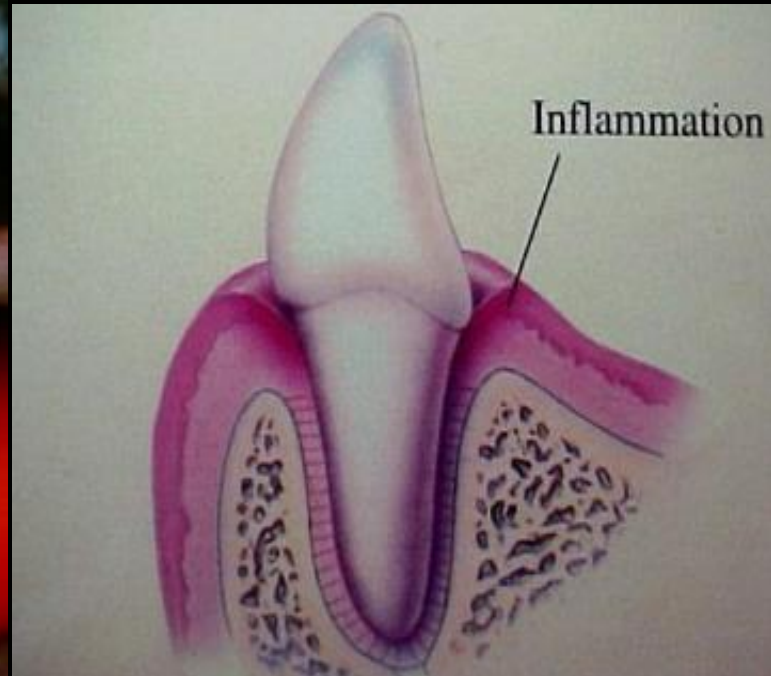
## Cage Biting Syndrome



Cage biting syndrome is another condition to consider when assessing the wear on teeth. This is caused by a dog biting or chewing the cage bars. Must be assessed by a vet to determine if pulp is exposed.

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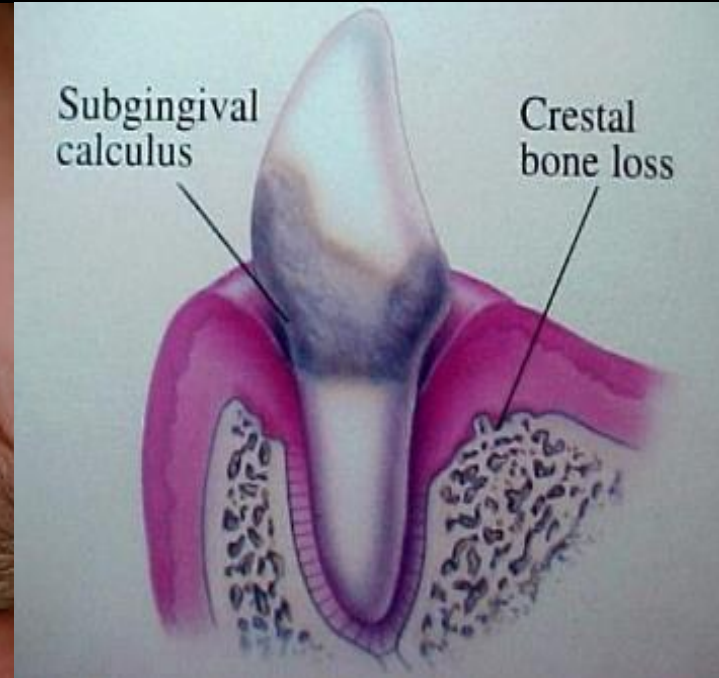
## Periodontal Disease: Stage 1 (Marginal Gingivitis)



Mild gingival inflammation, teeth are clean in appearance. Teeth should be brushed daily and examined by DVM yearly. Dental does not need to be done while in care, okay for adoption with disclosure.

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## Periodontal Disease: Stage 2 (Moderate Gingivitis)



Gingiva is swollen and inflamed. There is no loss of attachment to tooth. Dental cleaning required in the near future. Dental does not need to be done while in care, okay for adoption with disclosure.



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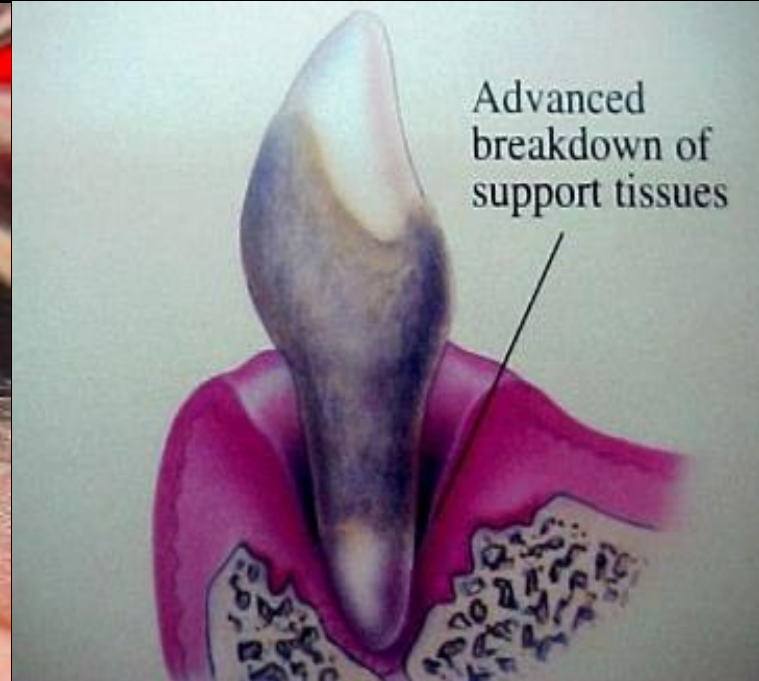
## Periodontal Disease: Stage 3 (Early Periodontitis)



Moderate periodontitis, 25-50% bone loss. Tooth mobility and some purulent discharge (pus). Gingiva is very inflamed and there is a loss of tooth attachment. Requires dental with possible extractions while in care. May need pain medication or antibiotics while awaiting dental.

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## Periodontal Disease: Stage 4 (Periodontitis)



Advanced periodontitis, marked bone loss (>50%). Teeth mobile, has been suffering from periodontitis for years. Needs vet exam as soon as possible. Requires dental with extractions while in care. May need pain medication or antibiotics while awaiting dental.



## Furcation Exposure



Exposure of the area between the tooth roots of multi-rooted teeth. Occurs due to bone loss caused by periodontitis. If a hole is present between the roots of the tooth, it must be extracted.

## Oral Masses



It is not possible to diagnose malignancy in an oral mass visually, they must be examined by DVM. In dogs masses may be benign or malignant. Masses left untreated may cause trauma, infection and/or pain.

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# Feline

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## Periodontal Disease: Stage 1 (Marginal Gingivitis)



Small band of inflammation on gingiva, teeth are clean in appearance. Teeth should be brushed daily and examined by DVM yearly. Dental does not need to be done while in care, okay for adoption with disclosure.

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## Periodontal Disease: Stage 2 (Moderate Gingivitis)



Gingiva is swollen and inflamed. There is no loss of attachment to tooth. Dental cleaning required in the near future. Dental does not need to be done while in care, okay for adoption with disclosure.



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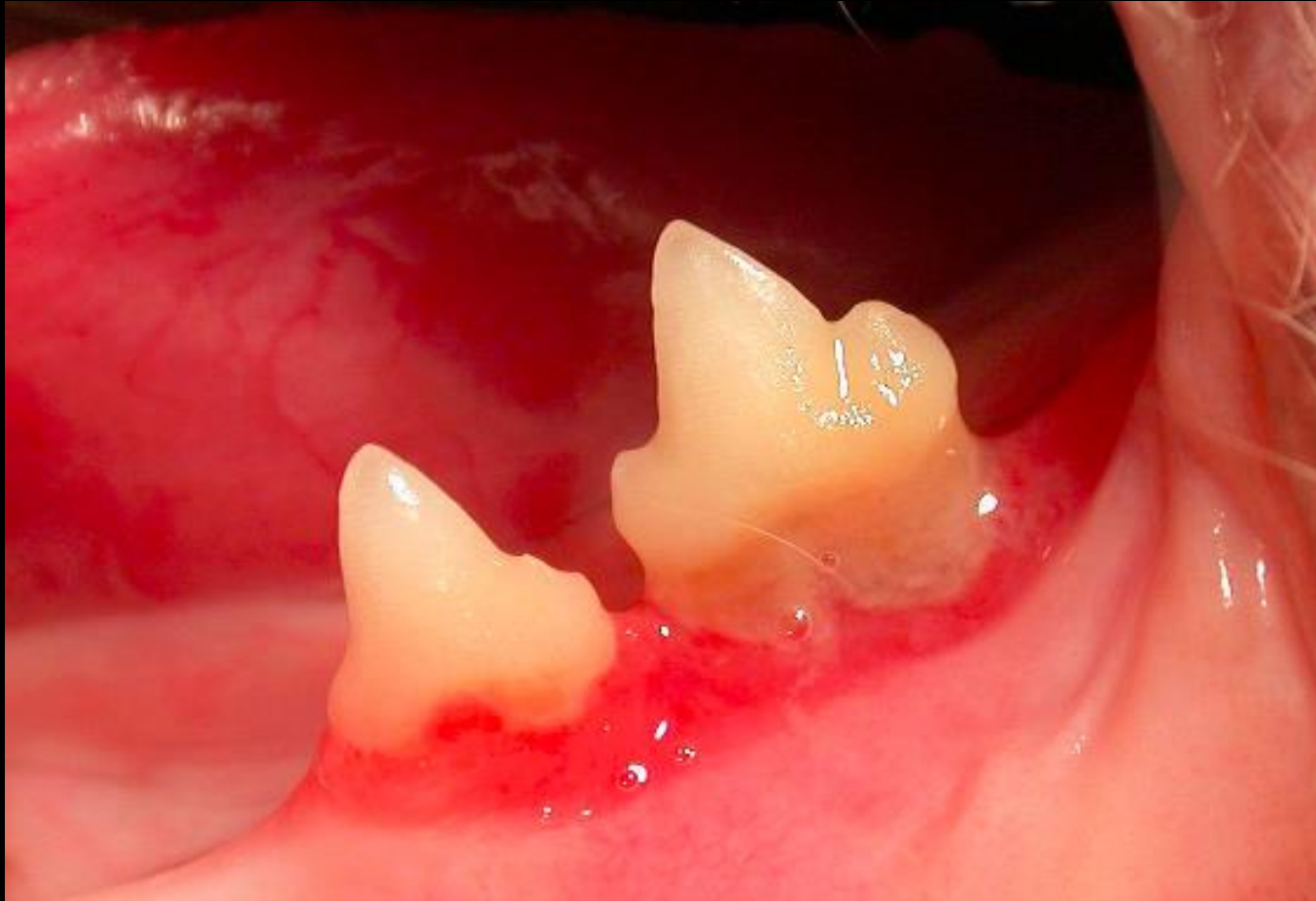
## Periodontal Disease: Stage 3 (Early Periodontitis)



Gingiva is very inflamed and there is a loss of attachment to teeth. Requires dental with possible extractions while in care. May need pain medication or antibiotics while awaiting dental.

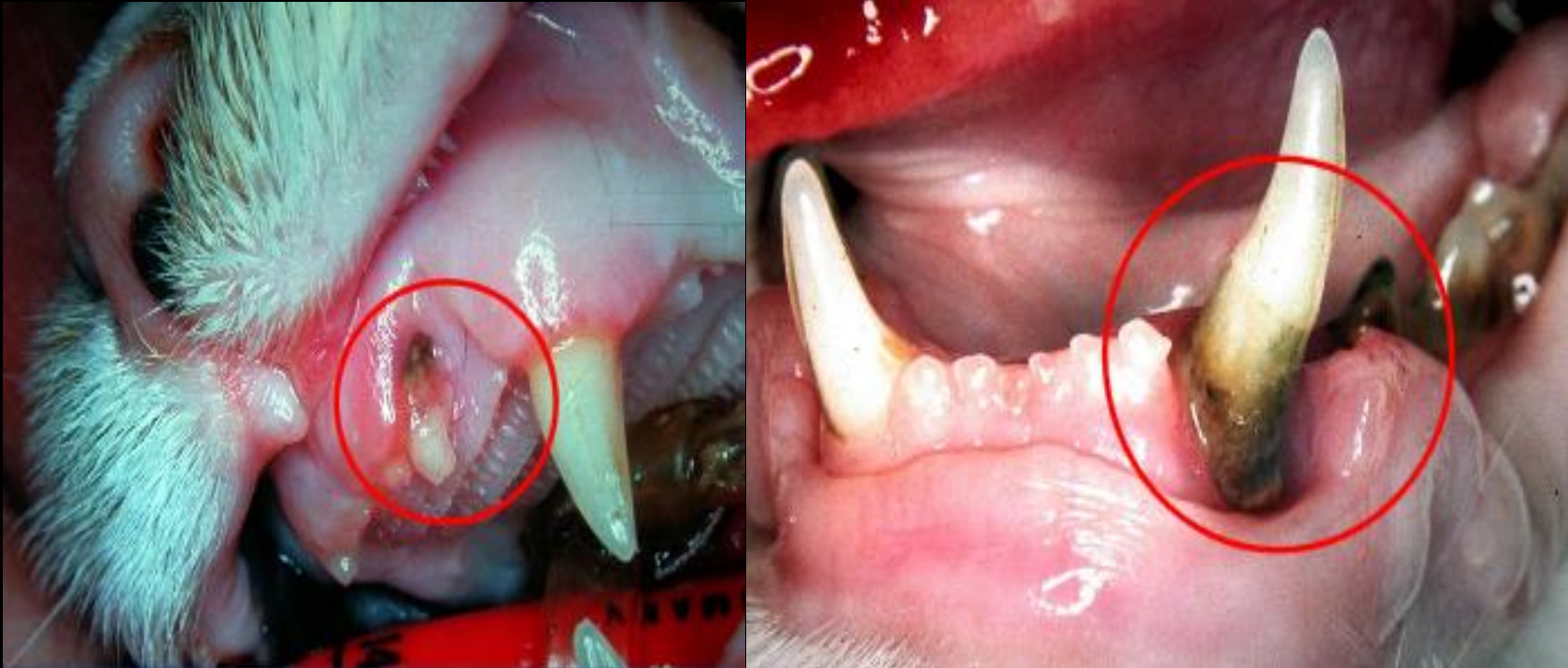
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## Periodontal Disease: Stage 4 (Periodontitis)



Marked periodontitis with 50% bone loss. Needs vet exam as soon as possible.  
Requires dental with extractions while in care. May need pain medication or antibiotics while awaiting dental.

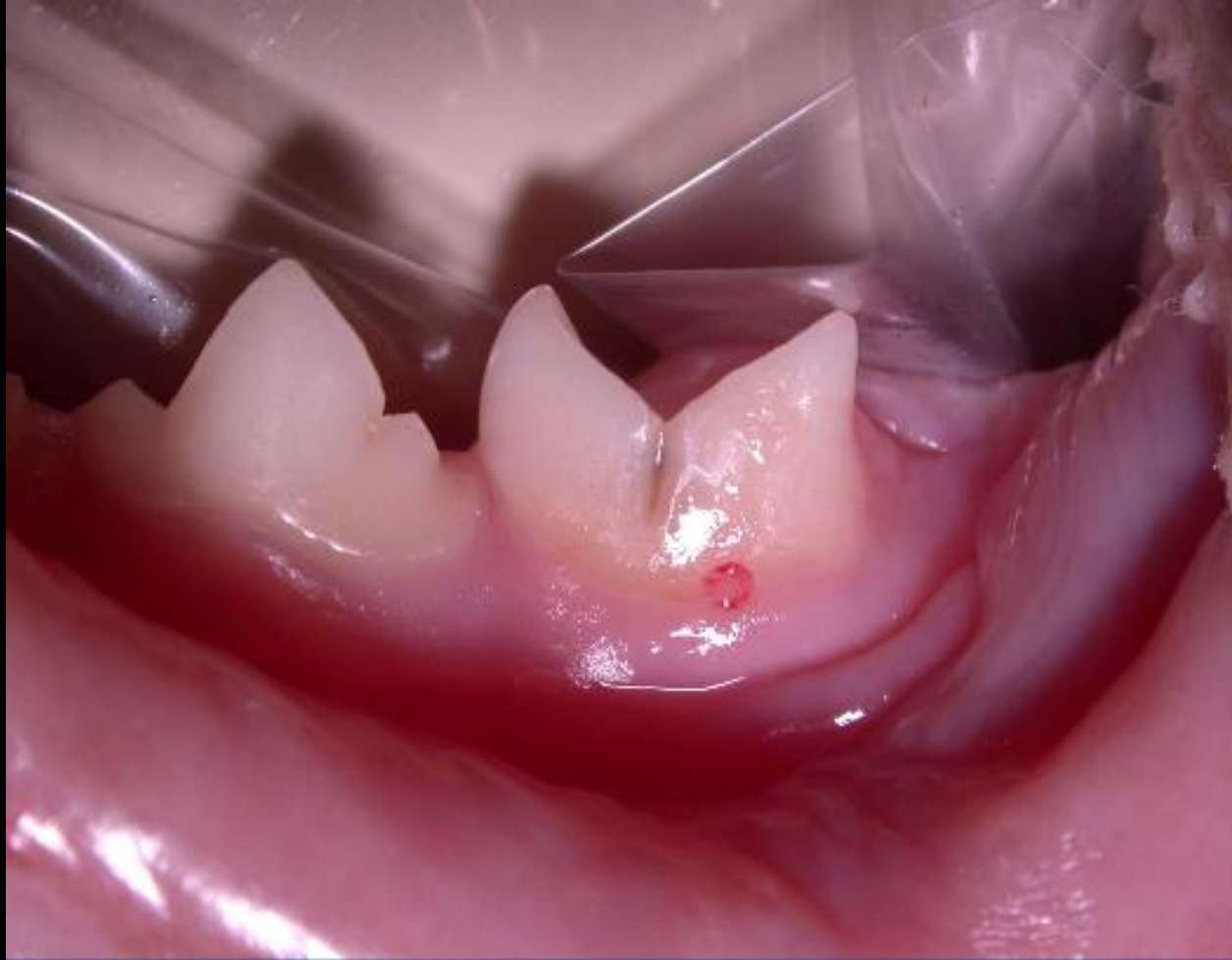
## Root Exposure



Needs vet exam as soon as possible. Requires dental with extraction of affected tooth or teeth while in care. May need pain medication or antibiotics while awaiting dental.



## Tooth Resorption Stage 1



Superficial lesion, barely visible, often missed. All cats with tooth resorption must see a veterinarian to determine plan. Affected teeth must be extracted.

## Tooth Resorption Stage 2



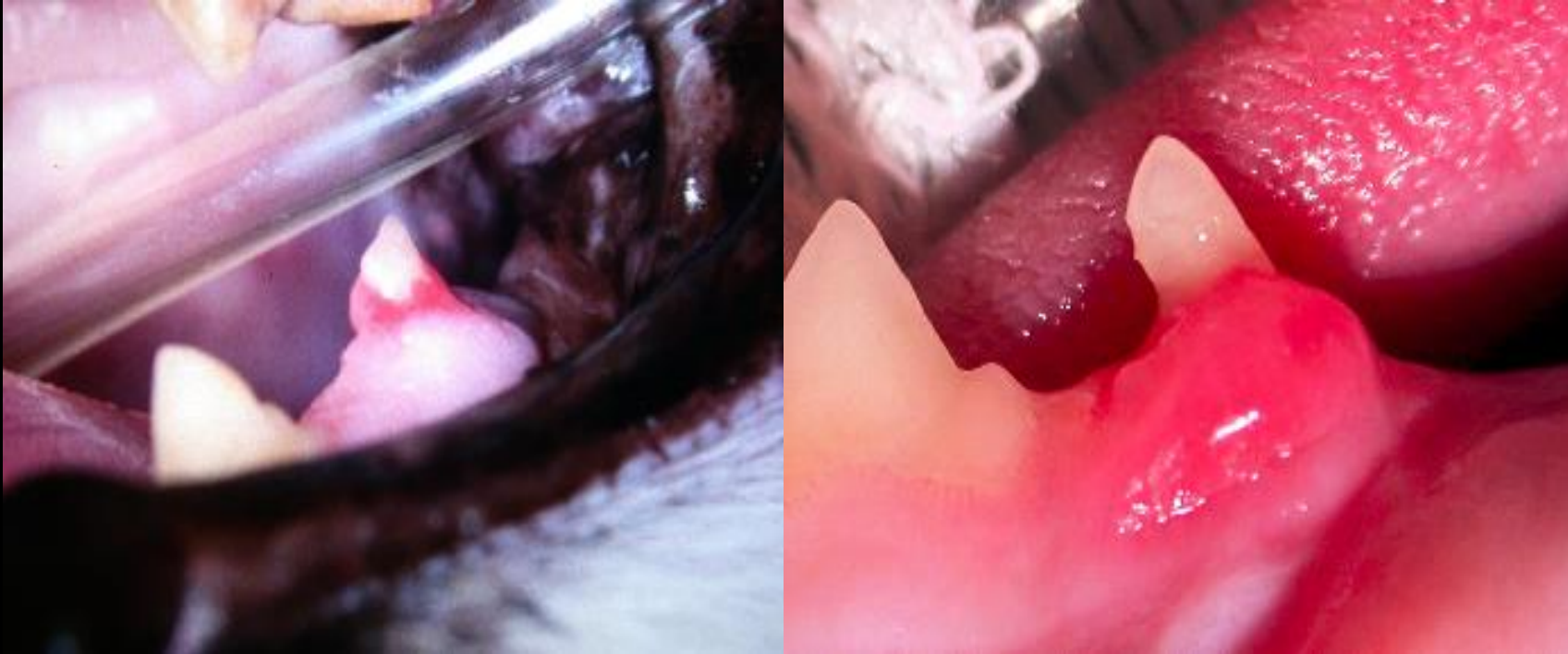
Lesion penetrates into dentin and gingiva covers the defect. Will be sensitive and potentially painful. All cats with tooth resorption must see a veterinarian to determine plan. Affected teeth must be extracted.

## Tooth Resorption Stage 3



Lesion penetrates to the pulp and the nerve is exposed. Pain is moderate to severe. All cats with tooth resorption must see a veterinarian to determine plan. Affected teeth must be extracted as soon as possible. Pain medication may be needed prior to procedure.

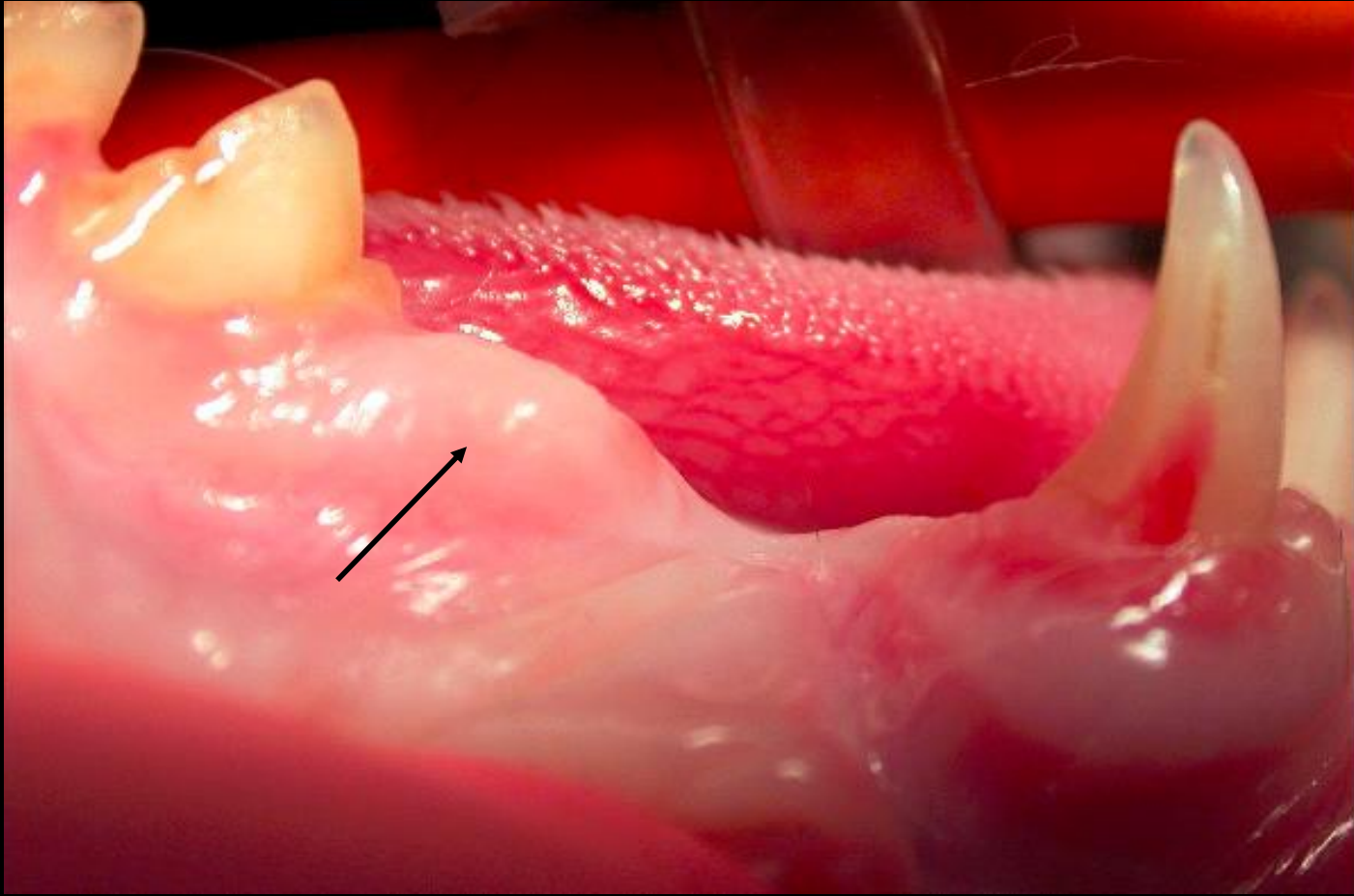
## Tooth Resorption Stage 4



Part of the crown is missing. Pain is moderate to severe. All cats with tooth resorption must see a veterinarian to determine plan. Affected teeth must be extracted as soon as possible. Pain medication may be needed prior to procedure.



## Tooth Resorption Stage 5



Crown is gone and only remnants of root of premolar are present (canine tooth still has an active lesion in this photo). Gingiva has healed over the defect and the lesion is dormant. No treatment required for premolar.

## Fractures – Complicated



Pulp is exposed (red area in center of tooth). Tooth must be extracted. Not treating will cause pain and lead to infection. Must be treated while in care. May require pain medication or antibiotics while awaiting dental.

## Fractures – Uncomplicated



The pulp is not exposed. No treatment is necessary. (Blood pictured is from dental probing during exam and is not part of the fracture)

## Oral Masses – Mandibular



Must see a veterinarian. Most oral masses in cats are malignant. Masses may look more like a swelling with a depressed or ulcerated surface than an obvious “growth.”



## Oral Masses – Maxillary



Must see a veterinarian. Most oral masses in cats are malignant. Masses may look more like a swelling with a depressed or ulcerated surface than an obvious “growth.”

## Malocclusion



In the photo on the right you can see the lower jaw is displaced rostrally (forward) and is deviated to the left of the patient due to the luxation of the right temporo-mandibular joint (TMJ). This requires immediate attention and is often seen when an animal has fallen from a high rise.

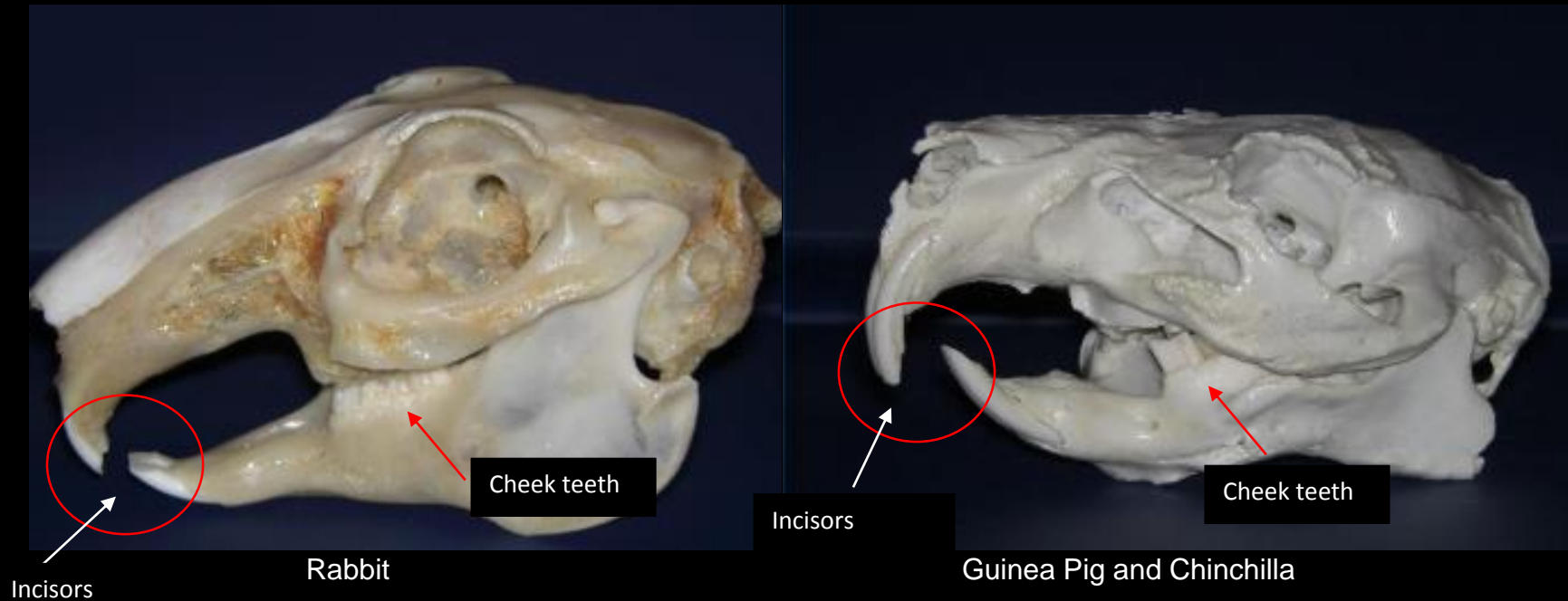
## Stomatitis



Severe oral inflammation due to an autoimmune reaction to plaque on the teeth.  
This is very painful and requires immediate veterinary attention.

# Small Mammals

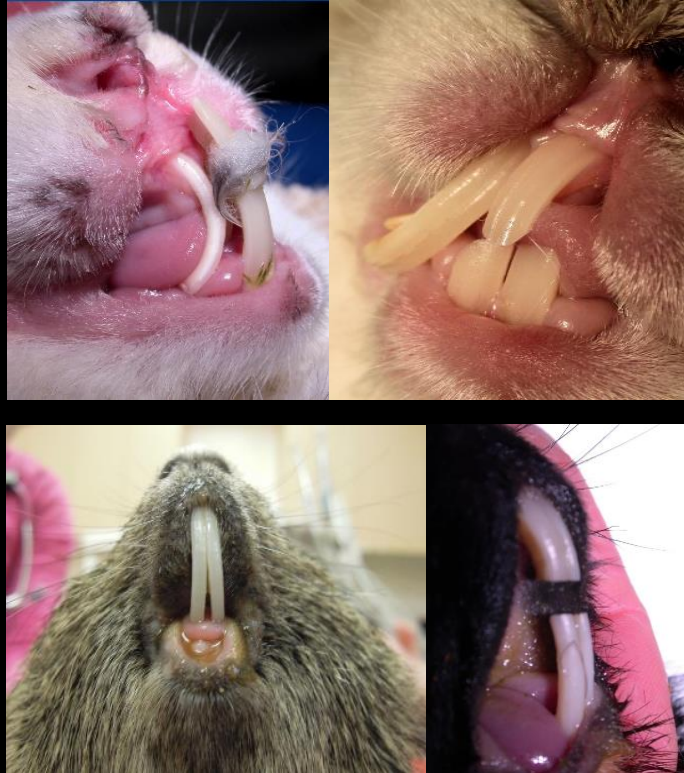
## Dentition



In rabbits, chinchillas and guinea pigs all teeth grow continuously. In small rodents (rats, mice, hamsters) only the incisors (front teeth) grow continuously.



## Elongation



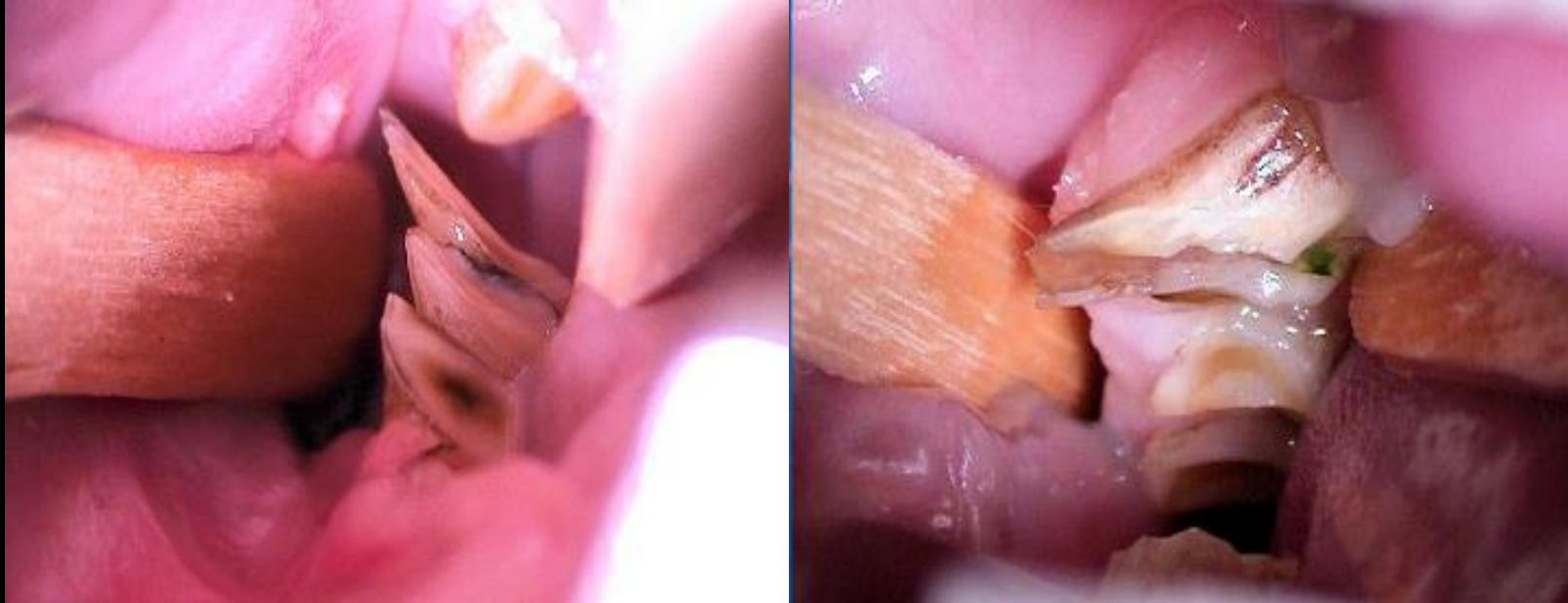
This condition needs to be examined by a vet knowledgeable in rabbits and rodents, and will likely require correction and an increase in dietary roughage (hay, grass). In rabbits, guinea pigs, and chinchillas, problems with the front teeth may be a sign of more serious problems with the back teeth. Top 2 photos are rabbits, bottom 2 photos are Guinea Pigs.

## Cheek Teeth Elongation



Cheek teeth (back teeth) in rabbits, chinchillas, and guinea pigs usually require sedation and specific tools to examine, though elongated incisors are easy to spot and are commonly caused by elongated cheek teeth. If treatment is pursued, it may need to be repeated regularly throughout the animal's life.

## Spurs



Elongated cheek teeth cause the animal's chewing patterns to form irregular shapes (spurs). These can be very sharp and will cut the cheeks and tongue.

Affected animals may drop food, drool, lose weight, and have decreased appetite/ grooming. In rabbits, guinea pigs, and chinchillas, problems with the front teeth may be a sign of more serious problems with the back teeth. If treatment is pursued, it will need to be repeated throughout the animal's life.

Refer to Adoptability Guidelines.



## Deviation



Need to be assessed by a DVM and possibly extracted as the teeth will continue to grow.

## Abscesses



Will show as a large area of swelling with a necrotic center or an already ruptured oozing sore. These animals must see a DVM as soon as possible. Often due to severe underlying dental disease. Top 2 photos are rabbits, bottom two photos are rodents.

## Missing Teeth



Missing incisors are easy to note and should be assessed by a DVM.



## Slobbers



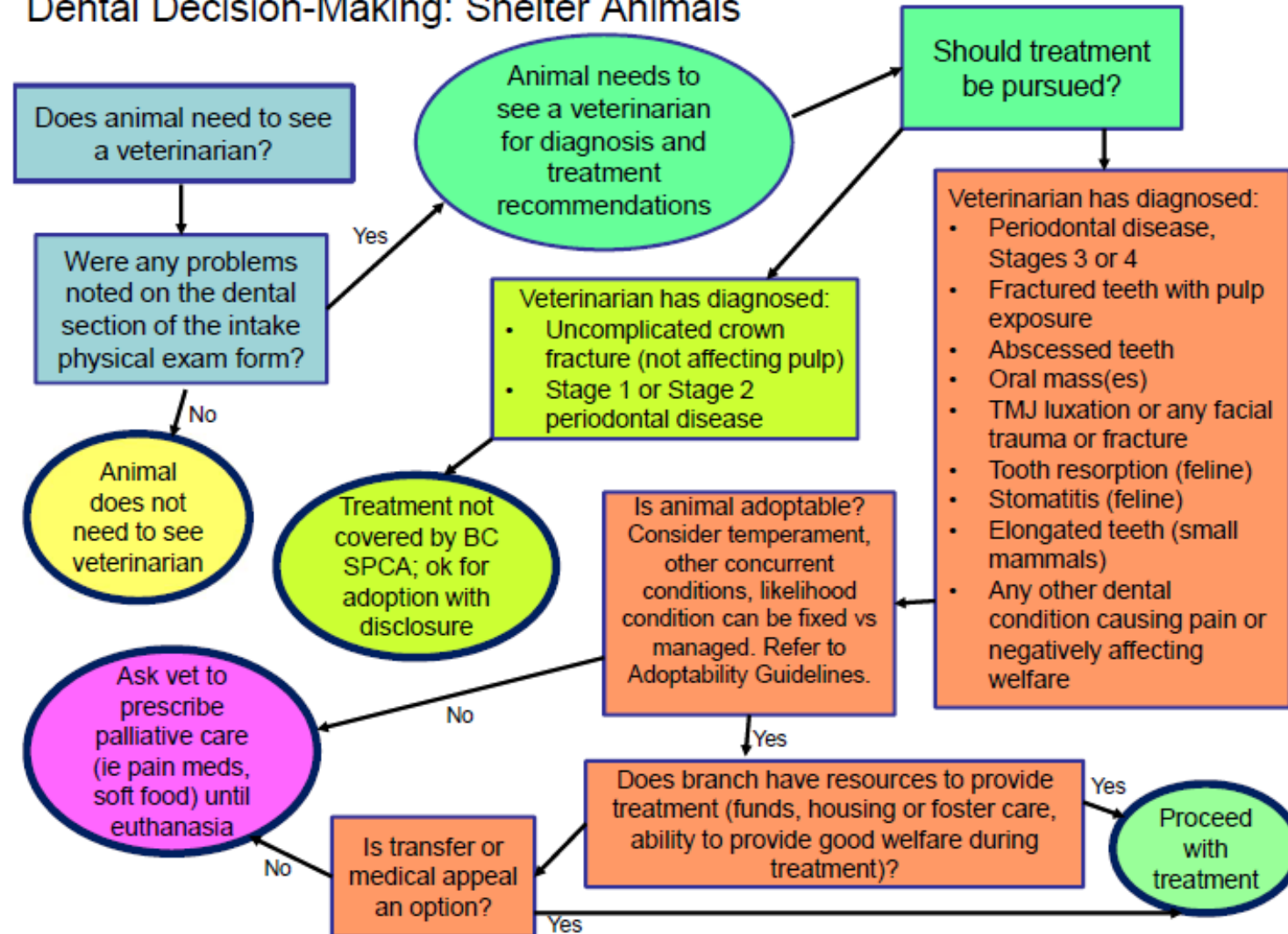
Wet neck and forepaws caused from excessive drooling are indicative of oral pain and significant dental disease. Must see a veterinarian as soon as possible. If treatment is pursued, needs pain meds and special diet until dental can be performed.



## DENTAL ASILOMAR QUICK REFERENCE

CONDITION	ASILOMAR CATEGORY	ADOPTABILITY CATEGORY
<b>CANINE</b>		
Abscessed Tooth or Teeth	TR	A
Fractured Teeth	H/TR	A
Oral Mass	TR/TM	PA
Periodontal Disease	TR/TM	PA
Worn Teeth	H/TM	A
<b>FELINE</b>		
Abscessed Tooth or Teeth	TR	A
Fractured Teeth	H/TR	A
Oral Mass	TR/TM	PA
Periodontal Disease	TR/TM	PA
Resorptive Lesion	TM	PA
Stomatitis	TM/UU	PA/NA
<b>SMALL ANIMALS</b>		
Incisor Overgrowth (Small Rodents)	TR/TM	PA
Incisor Overgrowth (Rabbits, GP, etc)	TM	NA
Molar Overgrowth or Malocclusion	TM	NA

## Dental Decision-Making: Shelter Animals



## Glossary

**Abscess:** A bacterial infection causing a collection of pus, usually at the apex of a tooth with a complicated fracture. Abscesses are painful.

**Apex:** The deep end of a tooth root.

**Attrition:** Chronic wear of teeth. Technically, attrition is caused by tooth-on-tooth contact, and abrasion is the term for wear caused by outside forces (such as chewing on objects).

**Cage-biting syndrome:** Specific type of dental wear caused by repetitive chewing on cage bars. Appears as a groove on the back part of the canine teeth. Consider underlying behavioural issues.

**Calculus** (also known as tartar): Hardened/ mineralized dental plaque.

**Cavitated** (i.e. cavitated mass): Containing a hole or cavity, for example, an oral mass with a cavitated component.

**Crown:** The portion of the tooth that is above the gumline.

**Deviation** (i.e. small mammal incisors): A tooth that is growing or positioned in a way that varies from the normal anatomic position.

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**Elongation:** Condition in rabbits, guinea pigs, and chinchillas where the cheek teeth (which grow continuously) are not worn down properly, and the crown becomes longer than usual. This can then lead to formation of spurs.

**Focal fibrous hyperplasia:** Benign mass or masses caused by a bacterial reaction to plaque, appearing as swelling at the gumline. Common in dogs, less common in cats. Gums may appear to grow over teeth. Treatable with dental care and surgery.

**Fracture, complicated:** A break or crack in the tooth such that the pulp cavity is exposed. These are painful and require treatment. Animals with fractures must see a veterinarian.

**Fracture, slab:** A type of fracture that usually occurs on the upper premolars (the chewing teeth) due to the outward pressure of chewing on something very hard. The tip of the tooth fractures and takes part of the side of the tooth with it. Can be complicated or uncomplicated. Animals with fractures must see a veterinarian.

**Fracture, uncomplicated:** A break or crack in the tooth such that the pulp cavity is not exposed. This must be determined by a veterinarian, but generally treatment is not required.

**Furcation exposure:** Exposure of the area between the tooth roots of multi-rooted teeth. Occurs due to bone loss caused by periodontitis.

**Gingiva:** The part of the oral mucosa that surrounds the teeth.



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**Gingivitis:** Inflammation of the gingiva in response to plaque.

**Incisor:** Narrow teeth at front of mouth. Dogs and cats have six incisors on the top and six incisors on the bottom. Rabbits have two large upper incisors and two large lower incisors, as well as two small upper incisors called peg teeth. Guinea pigs, chinchillas, and small rodents have two upper and two lower incisors.

**Luxated/ Luxation:** Dislocated/ dislocation (i.e. of the jaw).

**Malocclusion:** Misalignment of the teeth, particularly where the teeth of the upper and lower jaw do not fit together properly when the jaw is closed.

**Mandibular:** Pertaining to the bone of the lower jaw (mandible).

**Maxillary:** Pertaining to the bone of the upper jaw (maxilla).

**Oral mass:** A benign or malignant (cancer) growth in the mouth. It is not possible to determine whether a mass is benign or malignant just by looking at it. Most oral masses in cats are malignant. All animals with oral masses must see a veterinarian.

**Peg teeth:** Two small upper incisors in rabbits.

**Periodontal disease-** 4 stages:

Stage 1: Gingivitis only with normal tooth attachment structures.

Stage 2: Mild periodontitis with plaque and calculus starting to extend below gumline and early loss of tooth attachment.

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Stage 3: Moderate periodontitis with plaque and calculus extending further down root, formation of pockets, and loss of attachment structures. This can be uncomfortable/ painful and must be treated in shelter animals (requires anesthesia).

Stage 4: Advanced/severe periodontitis with loose teeth (inflammation and loss of bone/gum tissues). This can be uncomfortable/ painful and must be treated in shelter animals (requires anesthesia and dental extractions).

**Periodontal ligament:** Connective tissue that holds the tooth in the socket.

**Periodontium:** The tissues that surround and support the teeth. Includes the gingiva, periodontal ligament, cementum, and alveolar bone.

**Periodontitis:** Inflammation of the periodontium.

**Peripheral odontogenic fibroma:** Benign mass arising from the periodontal ligament, common in dogs and less common in cats. Appears as a swelling or growth of the gums (may also be referred to as an epulis). Treatable with surgery.

**Plaque:** Biofilm of particles and bacteria that form on surfaces of teeth. Can be removed with brushing, but if left intact, will progress to calculus.

**Pulp:** Central part of tooth containing nerves and blood vessels.

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**Purulent:** Containing, consisting of, or forming pus.

**Reparative dentin:** Protective substance produced by the tooth to protect the tooth from chronic wear. Will appear as a darker brown spot at worn part of tooth, but is smooth and when probed, the probe does not enter the pulp cavity.

**Root:** The portion of the tooth that is below the gumline.

**Slobbers:** A condition in rabbits, guinea pigs, and chinchillas where the lower jaw, neck, and possibly the front limbs are covered in saliva. This indicates severe, typically painful, dental disease.

**Spurs:** Sharp points that develop on the crowns of cheek teeth in rabbits, guinea pigs, and chinchillas when the teeth elongate and are not worn down evenly. This condition is painful and, if treated, must be treated under anesthesia by a veterinarian experienced in small mammal dentistry (not typically treatable in a shelter environment).

**Tooth resorption-** 5 stages (much more common in cats, in past was also called resorptive lesions [RL] or feline odontoclastic resorptive lesions [FORL]): A condition of unknown cause involving loss of tooth substance, often appears initially as red areas at the gumline. This condition can be painful and all cats with these lesions must see a veterinarian.

Stage 1: Superficial lesions that have not yet reached the dentin.

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Stage 2: Lesions affect the dentin but have not yet progressed into the pulp cavity.

Stage 3: Lesions affect the pulp cavity but tooth overall maintains its integrity.

Stage 4: Lesions causing significant crown or root damage with loss of tooth integrity.

Stage 5: Complete loss of crown and covering of gingiva over where tooth was; tooth remnants may be visible with radiographs.



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## Duty to Report and Dental Disease

Conditions that veterinarians should report if not treated

- **Fractures where there is pulp exposure** (always causes pain and eventual abscess)
- **Oral cancer** even if the animal is eating
- **Broken jaw or severe facial trauma** even if the animal is eating
- **Feline stomatitis**
- **Other painful conditions where pain is not treated.** Severe periodontal disease may fall into this category, but may not always be painful. Animals should be assessed for pain on an individual basis.