Camelid Dentistry

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Learning objectives

- To describe the normal dentition of camelids
- To explain common corrective dentistry procedures in camelids
- To explain treatments for cheek tooth problems in camelids
Normal Camelid Dentition
Alpacas and llamas have 30 to 32 adult teeth, which are all erupted by about six years of age.

Incisors

- six lower incisors are designed to contact the front portion of the roof of the mouth, called the dental pad.
- Alpaca and vicuna incisors have enamel only on the labial surface
- Llama and guanaco incisors have enamel on both labial and lingual surfaces
Llama Incisors

Alpaca
Cheek teeth

- 5 top and bottom on each side
- 2 Premolars
- 3 Molars
Fighting Teeth

- The upper third incisor and upper and lower canine teeth are called the fighting teeth.
- Females **CAN** have visible fighting teeth.
Female fighting teeth
Corrective Dentistry

- Concerned mainly with the incisors and the fighting teeth in males.
- The proper functioning of the incisors and cheek teeth is the first step in the alpaca and llama digestive process.
- These teeth should be kept in optimal condition for maximum efficiency.
- Animals with bad bites should be carefully considered as not suitable for breeding.
Incisor tooth problems

- Camelids eating grass need to have a good incisor-dental pad lineup in order to be able to efficiently bite off the plants for chewing.

- The ideal lineup has the tips of the incisors in contact with the dental pad approximately one eighth of an inch back from the front edge.
  - Very few camelids possess this ideal conformation.
  - Most of these animals are able to survive since they are raised in a noncompetitive environment.
  - Picking up hay is not a problem, even for animals with mild to moderate underbites.
Long incisors should be trimmed off so that they contact the dental pad at the front edge at least.

This is most often done for cosmetic reasons.

It can be accomplished with minimal restraint and/or sedation in a particularly fractious animal.
may prevent efficient grinding of food by the molar teeth, resulting in a malnourished animal.

Retained deciduous incisors should be removed

- may trap food resulting in gum disease
- may prevent the normal growth of the permanent incisors.
2 year old alpaca
Three common methods are used to trim incisors

- **Gigli wire**—used to remove the bulk of the tooth, and then a file is used to provide a smooth, even biting surface.

- A one-foot length of rubber hose can be held in the corners of the mouth across the top of the tongue to keep the jaws part way open to facilitate trimming.

- Porcine mouth speculums may also be used to keep the mouth open during trimming.
Tooth-O-Matic ®
Dremel ® Tool
Fighting Teeth

- All alpacas and llamas do not need to have their fighting teeth trimmed.
- If males are not aggressive fighters when housed with other males, or are just not housed with other males, the teeth can be left alone.
- Aggressive fighters often attack other males around the face or ears or in the testicles, so these animals should have their fighting teeth trimmed.
- Gigli wire or a Dremel tool are used to trim these sharp teeth down to the level of the gums.
Cheek tooth problems

- Not common
- An animal that takes a long time to chew grass or hay, or who spills grain while eating may be having trouble with sharp edges.
- Poor body condition can also be a sign of dental problems.
- If the animal strongly resists when pressure is put on cheeks over these teeth, they may have a problem with excessively sharp cheek teeth.
- This may be a difficult call in a high strung animal.
- Cheek teeth should be filed if the other problematic signs are observed.
- The outside edges of the upper cheek teeth and the inside edges of the lower cheek teeth are easily blunted with miniature horse dental floats or other thin files.
- Most animals do not object to this procedure.
- An immediate improvement in chewing is observed in most instances.
- I have done this 2 times in 18 years!
Camelid Jaw Abscesses
Common problems in mature animals

- No sex predilection
- May start when hay or other plant material or wood is lodged between the tooth and the socket
- Have been called tooth root abscesses
May be asymptomatic until a draining tract is discovered

- Palpable enlargement of soft tissue and mandible in area of the cheek teeth
- weight loss and problems chewing in advanced cases of long standing
Treating Jaw Abscesses

- Medical treatment is best in my opinion.
- Long term antibiotics
  - **Isoniazid®** at 6 mg/lb PO SID for 4 to 6 weeks
- Very successful even in long term cases with extensive bone remodeling
- Soft tissue and bone distortion often disappears
- Improvement usually seen within 1 week
Medical Treatment

- **Injectables**
  - Procaine Pen G at 1 ml per 15 lbs BW SQ SID for 30 days
  - Nuflor® at 6 ml/lb BW SQ every 3 days for 5 treatments
  - Long acting oxytetracycline at 9mg/lb SQ every 3 days for 5 treatments

- Flush any draining tracts daily with water/iodine or chlorhexidine solution/hydrogen peroxide and infuse with antiseptics such as Biozide® or Nolvasan Suspension®
Surgical treatments

- Open soft tissue over the draining/swollen area
- scrape the bone
- flush until healed
- Very painful
- Avoid if possible
Radiograph cheek teeth and remove those with evidence of tooth root damage

- Avoid if possible

- **Mandible sometimes fractures** during surgery as the lateral jaw plate must be cut and the tooth repelled out

- ?? Long term consequences of missing teeth with respect to adjacent teeth and opposing teeth??