



## **Equine Dentistry; A necessity not an option**

By Lisa Ross-Williams

Many horse owners are in the dark when it comes to the horse's mouth. Sure, some may open the lips and look at the front teeth, but often they don't know what dental balance is or how to get it. According to Judith Shoemaker, DVM, as featured in Natural Horse Magazine, "Mouth problems and poorly done dentistry causes more pain, lameness and neurological imbalance than any other injury and poor management practice."

Does this sound familiar? Your vet arrives for spring shots and offers to float your horse's teeth. He grabs his/her float, may or may not sedate your horse and spends 15-20 minutes filing off a couple sharp points. You breathe a sigh of relief believing your equine partner's mouth is taken care of for another year. However, this is not the case as there is so much more to equine dental care than just a basic float. By having a basic understanding of the horse's mouth, signs of dental issues, common dental problems, what owners can do to help and finding a qualified dentist, horse guardians can save their horses the pain and frustration of equine dental imbalance.

### **Why Equine Dentistry?**

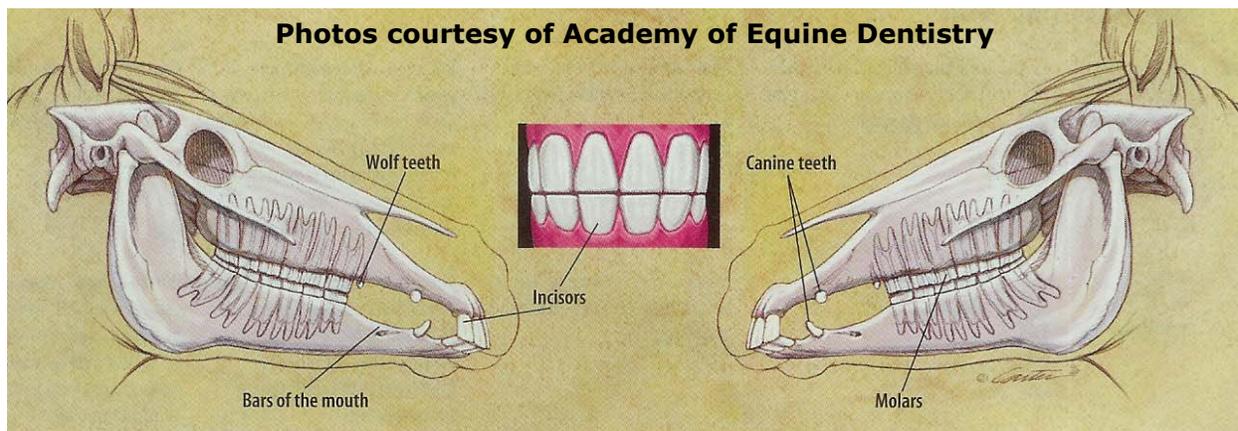
Face it. Domestication has taken the horse out of his natural environment and therefore their ability to self-maintain their bodies. This applies to hoof wear, self-medication ability, and tooth wear. We as their guardians then have the responsibility to do what nature can not.

In the wild, horses spend a majority of their time eating a variety of feedstuffs; using their incisors to tear native grass, weeds and herbs from the earth. Various barks demand the use of their powerful incisors to pull it away from the branches and this coarse fiber naturally wears down the molars. Because teeth erupt continuously this wear is essential. Since foals also partake in these practices, baby caps fall out at the appropriate times which allows the permanents to erupt normally.

On the other hand, common unnatural practices contribute to dental issues. Horses who eat only hay, pellets, or cubes and even horses on a soft mono-grass pasture do not use their incisors the way nature

intended. Because of this, without proper dental care they become too long, preventing molar occlusion (alignment). Soft or chopped feeds do not require extensive grinding by the molars resulting in unbalanced molar surface causing sharp points, hooks and ramps which are painful conditions covered later in this article. Finally, failure to feed at ground level is another contributing factor in dental imbalance. When in the natural ground level feeding position, a horse's lower jaw slides forward into proper grinding position. However when fed at shoulder level or higher, he is forced to chew with his molars not properly aligned, causing other issues and partially chewed food.

## The Horse's Mouth



For many people, the horse's mouth is a mystery and most are surprised at how big it actually is. In average horses it can be as much as a foot deep. To get a better perspective, the last molar is lined up with the eye. Knowing that, it is easier to understand how it would be impossible to do a full exam or dental work without a full mouth speculum holding the mouth open.

The lower jaw is more narrow than the upper which results in a very efficient grinding table. Keeping that in mind, horse's chew in a circular motion rather than up & down. If the molar table gets unbalanced, this chewing pattern is interfered with. The horse loses his ability to properly grind his food resulting in decreased digestion.

Much like humans, horses have two sets of teeth in

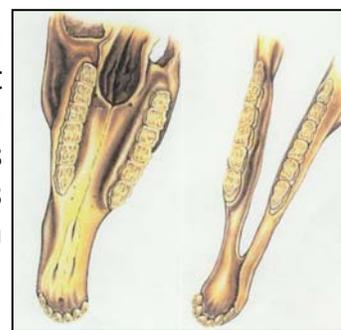


Photo Academy of Equine Dentistry

their lifetime. The baby or deciduous teeth start to come in about 7-10 days old. Around 2 ½ years (3 ½ for minis), horses begin to lose these caps which are replaced by permanents. The common process: 2 ½ YO-central incisors and 2<sup>nd</sup> premolars, 3 ½ YO-lateral incisors and 3<sup>rd</sup> molars, 4 ½ YO-corner incisors and 4<sup>th</sup> premolars, and 5-5 ½ YO complete set in.

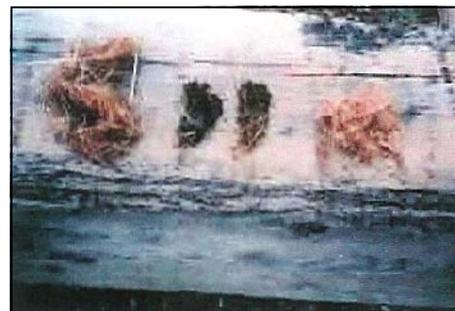
Although horses can have up to 44 teeth; 12 incisors, 12 premolars, 12 molars, 4 canines, and 4 wolf teeth, males usually have 40-42 while females between 36-38. It should be noted some mares do develop canine (fighting) teeth but normally these are only found in males.

Horse's teeth continuously erupt until they are senior, between 20 and 25, depending on previous dental care. This extra tooth is stored in deep pockets within the jaw and erupts to the point of occlusion. In other words, the tooth will erupt until it hits another surface, normally another tooth. Herein lies a problem; if the opposing tooth is missing, damaged or misworn, the stronger tooth will grow too long (nothing to stop it) which in turn causes other issues. These can include imbalance involving other teeth or in bad cases, perforation of the opposite gum tissue and possibly nasal cavity.

### Signs and Symptoms of Dental Issues

Most horses do show some physical signs of dental issues, some more obvious than others. Some common signs include:

- Dropping feed
- Excess saliva
- Weight loss (not in every case)
- Head tilting
- Frequent mild colics
- Bad Breath
- Quidding (balled up hay)
- Head tossing
- Eating too slowly
- Hard to bit



Example of Quidding. Horse will chew up hay and pack it around the teeth to reduce damage from sharp points.

- Bucking or rearing
- Head shyness
- Choke
- Poor attitude

Some less know signs:

- Mouth or nose discharge
- Dunking food in water
- Large hay pieces in manure
- Inability or reluctance to pick up leads
- Neck, back, or hock pain
- Eating hay before grain or pellets
- Chews on sand or rocks (sand colic issues)
- Head tilt when turning
- Uneven hoof wear and Body soreness



Uneven hoof wear can be a sign of dental imbalance

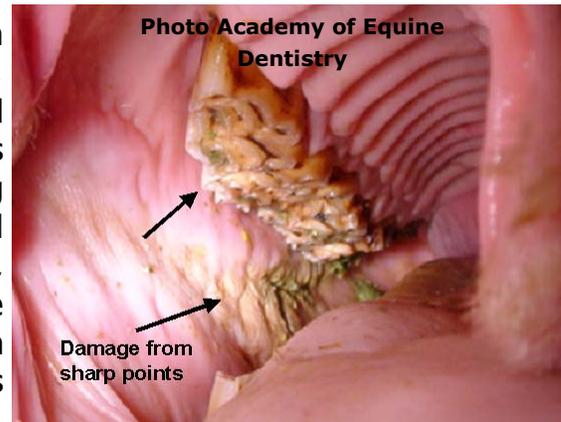
Many owners don't equate performance or behavior problems and body soreness with dental issues and instead blame the horse for misbehaving. But many times, it can be due to pain. If repeat visits are required by bodywork professionals such as chiropractic or massage, a dental imbalance may be to blame. Dental issues can contribute to neck, back and hock pain or even in the wear pattern of a hoof. Proper dental care is extremely important to whole horse soundness.

One final note about signs and symptoms. There are always the few stoic horses who seem to endure dental pain without a complaint or skipping a beat. Please ensure your horse has an annual dental exam whether signs are seen or not.

### **Common Dental Issues**

Although each horse is unique and may experience different problems, there are some common ones which horse owners should be aware of.

Sharp points-Razor sharp edges which develop on the sides of the molars; cheek side of the upper molars and tongue side of the lowers. These edges cut into the cheek and tongue causing lacerated tissue often having a ground hamburger texture. Any headgear, either bridle or halter rubs against these sharp points causing pain. This condition also interferes with chewing and traps food particles.



Hooks & Ramps-Long points which develop on the 1<sup>st</sup> premolar & last rear molar and often caused by a malocclusion. These long points can lacerate gums and prevent circular chewing.

Long or Uneven Incisors-When the front teeth get too long due to lack of wear or if one gets broken or unevenly worn, this condition can cause misalignment of the molars. This can result in improperly chewed food but also stresses the muscles and joints of the head and poll.



Waves-Crests and valleys occurring on the molars which cause a wave appearance when viewed from the side. Some teeth become longer which grinds the opposite tooth down resulting in an uneven chewing surface and contributes to sharp points.

Canine & Wolf Teeth-Canines are located behind the incisors and are almost tusk-like. These are fighting teeth and normally only found in males. Canines can grow too long and interfere with chewing and therefore often shortened by Equine Dentists.





Wolf teeth are small teeth located in front of the first premolar, normally present in the upper jaw and occasionally the lower. They can interfere with the bit, can be easily broken off and normally are removed between 1-2 years of age. Blind wolf teeth are also seen or actually unseen which are extremely painful for the horse. Rather than erupting through the gum, the small teeth remain below the skin and are constantly irritated by pressure such as from a bit or even eating.

Retained Caps- This occurs when the baby caps do not shed properly and can prevent the permanents from erupting into correct position. At times this can be very painful and often the retained caps are removed by the dental practitioner. Remember, horses begin losing the caps around 2 ½ years of age so it's important they be checked often for retained caps.



### **What Can Owners Do?**

The first thing an owner should do is become knowledgeable about the basics of equine dental care and understand what common but detrimental care practices should be avoided. Knowledge allows you to make informed decisions for your horse.

- Feed at ground level which not only allows the horse his natural feeding position but can also reduce respiratory issues by not directly inhaling dust and hay particles.
- Offer free-choice or multiple feedings of a variety of course grass hay. This helps the horse wear down his molars with frequent grinding.
- Provide trees, shrubs and natural logs if possible. This allows use of the incisors for tearing as well as providing additional minerals the horse may need.
- Pick an important date each year for an exam by a trained dental professional

- Understand horses have certain needs at various ages and for certain breeds.
- **6 months to 1 year**-An exam should be conducted to check for possible defects to ensure the mouth is developing properly.
  - **Between 1-2 years**-Wolf teeth are normally removed. Sharp points can develop faster in baby teeth because they are softer and these should be removed as well as any hooks, ramps or waves.
  - **Between 2 ½-5 years**-Frequent checks for retained caps and sharp points.
  - **Between 5-20 years**-Annual exams and work if needed.
  - **Senior horses 20+ years**-At this age, they are starting to run out of tooth reserves and therefore become deficient in tooth surface. This decreases their ability to chew course food and may require a special diet. Proper dental care from early on can help horses have strong, healthy teeth later in life.
  - **Miniature horses**-Minis, because of their smaller heads are more at risk for over-crowding or displaced teeth. Also, remember they do not start to shed their caps until around 3 ½ years old.
  - **Draft horses**-Due to their very large teeth, draft breed may have issues with proper permanent tooth eruption.

Although this doesn't replace a full exam by a qualified dentist, the following basic owner exam can be helpful in spotting dental imbalance.

- Is chewing circular or up & down? It should be circular.
- Is the face symmetrical? Eyes, ears, and nostrils should be level.
- Is the cavity and muscle above the eye larger on one side than the other? If so, he may be chewing on only one side for some reason.
- Are the incisors level?
- Feel softly along the side of the face where the molars are. Does the horse jerk away?
- Feel the TMJ (where jaws attach below ear). Is it sore?

## Finding a Qualified Dentist

As seen above, thorough dental care is more than just a yearly float. Unfortunately, many horse owners assume their veterinarian has been completely trained in dental care but this just isn't the case. US Veterinary colleges do not teach equine dentistry and therefore it is not required for graduation. Some colleges are now offering an elective, but even this is only a very basic course. Think of it this way—



You wouldn't go to your MD to have your teeth done unless you were dealing with an infection or broken jaw. Why? Because they are not trained in dentistry. Instead a visit to your dentist would be in order. It's the same for horses.

Fortunately there are very qualified Certified Equine Dentists who have attended intensive programs through one of the US Equine Dental Schools. These practitioners not only receive in-depth study in dentistry but also anatomy, conformation, horse handling and more. There are three levels of certification which include:

- Certified Equine Dentist (CEqD) which requires a minimum of 300 hours
- Advanced Certified Equine Dentist (ACEqD) at a minimum of 500 hours
- Master Certified Equine Dentist (MCEqD) with a minimum of 1000 hours of study

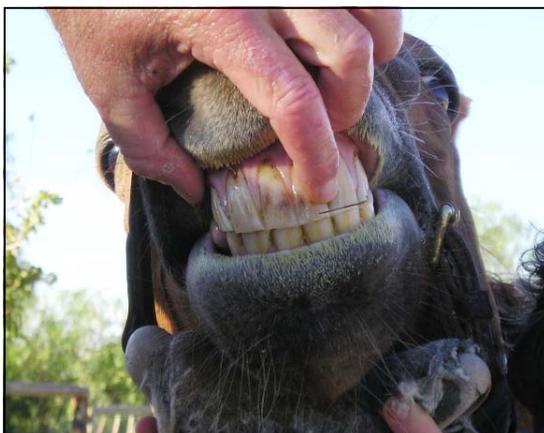
In addition, most of these practitioners return every year for updates on the latest advances. To find listings of these practitioners from the Academy of Equine Dentistry, visit [www.equinedentistry.com](http://www.equinedentistry.com).

Once you find a CED, you should get some references to call and talk with. Not only is their level of dental competence important but also the way they handle the horses. Finding someone you will mesh with and who will help you learn and understand is very important also. This practitioner will be part of your horse care team for many years to come and a good

relationship is essential.

Proper dental care, just as appropriate feeding, fresh water and hoof care, is a necessity not an option for a happy, healthy horse. With today's greater understanding of equine dental needs and the availability of Certified Equine Dentists, there is no reason for horses to suffer.

### Example of Incisor Reduction



A special thanks to the Academy of Equine Dentistry for providing a number of the photos used in this article. [www.equinedentistry.com](http://www.equinedentistry.com)

**About the Author:** Lisa Ross-Williams is a natural horse care consultant, freelance writer, clinician, and host of the **If Your Horse Could Talk** show. Lisa has immersed herself in extensive research, hands-on experience, and attending many clinics and seminars

including natural horsemanship, hoof care, massage & stretching, essential oils, animal communication, iridology, and nutrition. She has earned a degree in Environmental Plant Science, completed the Basic Veterinary Homeopathy course through the British Institute of Homeopathy and working on her certification course in Iridology. Her herd of six have been some of her best teachers. Lisa has dedicated herself to educating horse owners to a more natural approach through her company, If Your Horse Could Talk, including her extensive website, [www.naturalhorsetalk.com](http://www.naturalhorsetalk.com), the show webcasts, consultations, and clinics.



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