

EQUINE VETERINARY DENTISTRY



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Dr. Burnett has been an equine veterinarian for 22 years. For the past 8 years she has devoted her practice solely to dentistry in horses. Her practice techniques have been published in major horsemanship journals, including *Western Horseman*. She has published articles for major veterinary journals, and taught and mentored veterinarians and veterinary students at the state and national level. Based in Spokane, she is licensed in multiple states, and practices in Washington, Idaho, Montana and California. She is a former eventer, and currently trains her Morgan mare in dressage.

Why horses need dentistry.

For the same reason that dogs, cats and humans do genetics and an unnatural diet (in the case of the horse, dry hay and grain that are hard to chew and alter the bite).

How common is dental disease?

Studies prove that 80 percent of randomly selected domestic horses have dental disease that, if corrected, could resolve the problem and/or prevent worsening of the problem. Common problems include:

- Sharp points on edges of teeth can cause pain, reduce chewing stroke severely, ulcerate soft tissues, and even fracture teeth.

- Malocclusions – abnormally shaped surface of one or more teeth that cause abnormal chewing and jaw function, leading to pain, periodontal (gum) disease, and in some cases fractured teeth. Eruption of teeth in the wrong part of the mouth is another common cause of malocclusion, and can cause periodontal disease and mouth ulcers.

- Periodontal disease - an infection of the tissue around the tooth that causes pain, dissemination of the bacteria to all organs and in many cases infection of the tooth, causing pain and necessitating extraction. This is very common, and hard to treat when in advanced stages.

- Cavities, which can cause pain and/or fracture of a tooth.

Difference between “floating” and modern dentistry.

This is easiest to understand if you compare modern human dentistry with dentistry 75 years ago.

Back then, the approach was not to perform thorough examinations or x-rays. It was reactive – the dentist did very little to prevent disease or stop it in its early stages. Instead, patients had teeth extracted (“pulled”) once the teeth got infected and painful. By the time the tooth needed extraction, the patient had suffered considerably and endured systemic health problems. Afterward, the remaining teeth often got infected after shifting around near the space left by the extracted tooth.

Twenty years ago, this was the approach to dentistry in horses as well. Veterinarians did not have modern medications to keep horses quiet and comfortable for adequate dentistry. They had rudimentary instruments. So the vets did the best they could with what they had. They had no way to safely do a thorough examination and dentistry in the horse, so they could only file off as many sharp points and uneven teeth as they could, leaving a lot of horses with worsening problems that never got treated. The result of doing “a float” is that in a very large percentage of horses, this was not enough to prevent disease. As a result, many suffered silently for years. Just like the human dentist 75 years ago, the vets could only “react” to serious disease that developed, putting painful horses on soft feed and extracting teeth, an invasive and painful procedure.

What equine dentistry, properly performed, looks like today

It is a medical procedure that should be as thorough as a lameness, medical, reproductive, or other procedure.

In medicine, it is universally understood that performing a treatment without a thorough physical examination is not an acceptable standard of care. Simply filing down teeth without a thorough examination is no longer the “gold standard” in equine practice, since we now have the medication and instruments to make a full medical examination of the mouth before treating.

A complete and proper dental examination always includes a thorough examination of every tooth in the mouth, as well as the soft tissues (entire head, lips, cheeks, tongue, bars of mouth, etc.). A horse is commonly sedated for the procedure. Once sedated, the veterinarian opens the horse’s mouth with a speculum. It is held in place by a strap that goes over the poll. The mouth is gently opened via the bite plates.



The entire mouth, including the insides of the cheeks, palate, bars of the mouth, gums and teeth, are evaluated with a bright surgical lamp and a special equine intraoral mirror. In order to do a thorough exam, the mirror must be used. The front teeth must also be examined, since disease in this part of the mouth is common and can be very painful.

After the examination, the vet points out any problems and shares the treatment plan with the owner. In most cases, the treatment is fairly straightforward and affordable, requiring removal of sharp points and reduction of overly tall teeth, thus “balancing” the mouth to return it to a normal chewing pattern. Several instruments, most motorized, are required in order to do a thorough job. Balancing, also called equilibration, prevents pain and excessive pressure on teeth that can cause damage and periodontal (gum) disease. It also prevents jaw pain. Periodontal disease, if present, is treated. Sometimes radiographs are ordered to better define the treatment plan.

A dental procedure is never complete until the veterinarian checks his/or her work. This requires retracting the cheek with a retractor and making sure that the pressure on any one tooth is not excessive. Failure to do this can cause TMJ (temporomandibular) joint pain, limited side-to-side grinding motion (up to 50 percent or more), periodontal disease, and tooth breakage.

It is important to recognize that since this is a comprehensive medical procedure, requiring many expensive instruments (that must be meticulously maintained), a considerable amount of time, and expensive continuing education on the part of the veterinarians in this newer and rapidly changing field. For these reasons, comprehensive dental care will cost more than the “float” fees that owners are used to. Veterinarians have different levels of expertise in dentistry, and many still only provide the simple float, so if you expect a more thorough exam and procedure then it is important to ask for referrals from those you trust. Teeth can be damaged if instruments are used improperly or the practitioner is not greatly skilled in dentistry. If early problems are missed by an incomplete examination, they will slowly worsen. It is commonplace for clients to have one or more different veterinarians with expertise in different areas.

It may be tempting to hire the services of non-veterinarians who call themselves “dentists”. Many of them claim that they are the qualified “dentists” and we are just veterinarians, giving the false impression that they have expertise that is part of a licensed, regulated profession, when in fact only veterinarians can make that claim. Despite this self-proclaimed title, they have no formal medical or dental training. The entire tooth in the horse is living tissue, and can be damaged permanently by someone who does not understand anatomy, physiology and medicine.

They can easily injure or kill your horse with sedatives, which they can only obtain illegally, and in fact it is illegal for these “dentists” to sedate or perform dental work on horses in Washington. There are plenty of competent veterinary dental practitioners in Washington, so it is unnecessary to employ these dishonest individuals.

In this age of inflation, it can be tempting to delay or forego dentistry, or settle for a “float” without a thorough exam and balancing. I often hear owners say that their horse has not developed any problems yet, so they are going to wait. This reactive intervention, which can cause pain and permanent oral disease, which causes suffering and costs more – horses with bad teeth can require extractions or deep treatment of periodontal disease, colic more, choke, lose weight, and require more feed, since many leave their stems (wastage) and require more feed to keep their weight up.

If you take the cost of the average comprehensive dental procedure, and subtract the typical fee for traditional floating, the difference in cost is approximately 4 lattes a month, a subscription to Showtime, or the amount you could shave off your electricity bill if everyone was dedicated to turning off lights and computers when they are not being used. It costs less than the farrier, vitamin supplements, and proper de-worming. It is one of the best values in preventive care out there.

For more information on dentistry, including photographs and illustrations, visit www.thehorse.com.