

Equine Dentistry: Part 2 – Performance

There are many different opinions on how effective dental treatments are on equine performance. There is still much research to be done. However, recent observation and research may be cause for reconsidering commonplace techniques in equine dentistry.

As discussed in Part I of this article, an educated horse owner should have a basic understanding of the anatomy and function of equine teeth and understand the concept of continuous dental eruption. Age and genetics also play a critical role in determining how much dentistry is required for each horse. Since so much depends on the natural occlusion (the meeting of the upper and lower rows of teeth) and the chewing characteristics for each individual horse, understanding these things allows one to be aware of the different problems that can develop, and to be on the lookout for signs.

Horses of different ages have different types of dental problems that can affect general health and performance. Young horses in training suffer from retained “caps” (baby teeth), sharp wolf teeth and sharp dental points. Horses in their prime may have dental points and various dental overgrowths, depending on their specific occlusion. More rarely, horses of any age can have a “dental accident” such as a cracked tooth or dental abscess. Abnormal wear patterns like “wave mouth” may develop in horses who either have abnormal occlusion or who lack dental maintenance. Aged horses, especially those that have not had consistent dental care, suffer from lost and severely worn teeth.

Across the age groups and disciplines, the main emphasis behind dentistry to enhance performance include:

- Removal of any dental overgrowth that causes

discomfort. This is also beneficial from a health standpoint.

- Give special attention to smoothing cheek teeth that are in proximity to the bit. This includes the so called "bit-seats." The placement of a bit seat involves aggressive rounding and smoothing of the front premolar teeth. This is somewhat controversial as it removes normal grinding surface from the tooth.
- The attainment of "maximal mobility" of the upper jaw with respect to the lower jaw by preventing locking of one jaw versus the other on dental overgrowths. In theory, this allows less binding of one jaw versus the other when horses bend at the poll, and that this improves comfort. The fine points of this approach are controversial.
- Aggressive maintenance and manipulation of the incisors (the front teeth) to ensure proper occlusion of the cheek teeth and to achieve maximum mobility of the jaws with respect to one another.

There is debate in the horse, veterinary, and non-veterinary dental communities concerning the effectiveness of some of these treatments. Some riders claim great benefit from them while others can't detect a difference.

Non-veterinary equine dentists have become common in the horse world. Some of these individuals have developed great technical skill. They have, in many cases, led the way in terms of techniques and the development of equipment. State laws regarding non-veterinary dental practice vary from state to state. Most require that a veterinarian directly supervise the work of non-veterinary dentists. It is illegal in many states for non-veterinarians to practice dentistry on client horses without direct supervision by a veterinarian. This means that a veterinarian must examine the horse, decide what work needs to be done, and the non-veterinary dentist must work in the presence of the veterinarian. It is also illegal

for non-veterinarians to use sedatives and tranquilizers on client horses.

Many equine veterinarians take a special interest in dentistry and have taken additional training in this area. The advantage of using an experienced equine veterinarian is that he or she is able to evaluate the whole animal, rather than just the teeth. Your veterinarian can then help you to formulate an approach that takes into account your goals and maximizes the health and well-being of your horse.

The revolution in equine dentistry has benefited horse owners and horses in many ways. While most horses require some dental maintenance, not all require frequent and intensive motorized dentistry. The pendulum of thought on dentistry, like it has in many other areas of equine practice, tends to swing from one extreme to the other.

I have always felt that too much dentistry is just as bad or worse than too little. Obviously, equine teeth have worked for them for millions of years. It never made sense to me that we should be too aggressive in trying to change something that we didn't design in the first place, so I have always taken a thorough but conservative approach. For people to think that because we now have the tools and techniques to aggressively change the shape of equine teeth, that we should, seems silly to me. Yet many "equine dentists" have done just this, many without any real proof that what they are doing is necessarily beneficial to the horse or rider.

Veterinarians thoughts on dentistry have changed as we have seen how horses that have received aggressive dental maintenance with motorized equipment have fared over the years. There have been many horses greatly helped by the smart use of these techniques. Unfortunately, some horses have been hurt by overaggressive use of power tools. There is more and more controversy over how aggressive to be in shaping teeth.

Recent research on normal horses has shown that in horses having no dental problems, there is no advantage (with respect

to weight gain) to taking off dental points versus leaving them alone to function as nature intended. Any advantage is purely preventative.

So where does this leave horse people with respect to a realistic and constructive approach to equine dentistry?

- Learn the basics of equine dentistry, including the unique problems for horses in different age groups.
- Distinguish between dentistry for optimal health versus dentistry done to maximize performance. While certain performance-enhancing dental procedures may be useful in specific situations, understand that some of these claims may be exaggerated.
- Appreciate the fact that horse's teeth have evolved for over millions of years. Whatever changes we make to their teeth, we should always take a humble approach.

The best you can do for your horse is to become educated in all aspects of equine care, including dentistry. In addition, regular examination by an experienced veterinarian will ensure that your horse's general health, as well as their teeth, are maintained.

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