



Why Does My Horse Need To See a Dentist?

By Claire Tungseth, DVM

It has become common knowledge that a horse cannot perform to his maximum ability if he is experiencing oral pain. In the last ten years, research has demonstrated that oral function and dental alignment have a dramatic impact on performance. Simply removing sharp points in the mouth is no longer the standard of care. Performance dentistry has evolved into an individualized oral exam evaluating the function, symmetry, and balance of each horse's incisors and molars. First, let's discuss why horses develop sharp points in their mouth.

Horses have hypsodontic teeth, meaning their teeth slowly erupt (grow) throughout their life. One hypsodontic tooth measures approximately 2.5 – 4 inches in length with a majority of the tooth residing below the gum line. The adult equine mouth contains 36-44 teeth including six lower and upper incisors, four canine teeth, two wolf teeth, six upper and lower premolars, and six upper and lower molars. A properly fitted bit resides in the interdental space (the space located between the incisors and the cheek teeth). Many owners do not realize that a horse's dental arcade reaches as far back as the eye. A majority of the horse's dental problems occur in the 24 teeth located behind the bit where a majority of chewing happens.

In order to efficiently chew food, the horse's upper dental arcade is set wider apart than the lower dental arcade. The chewing surface of the upper teeth overlap the lower teeth by 60%, this is a normal disparity. As horses chew, the occlusal surface (chewing surface) of each tooth is only worn down where the opposing tooth comes into contact. A horse's tooth continues to erupt throughout their life, so the portion of the tooth not being worn down continues to grow and forms into sharp points. These sharp points develop along the cheeks on the upper arcade and by the tongue on the lower arcade. If these points are not floated on a regular basis, they can become razor sharp causing lacerations to the cheeks and tongue. Ideally, horses below the age of 20 should have their teeth floated every six months and horses above the age of 20 should have their teeth floated once a year.

Horses use their lips to grab food and then the tongue orients the food to the back of the mouth. The cheek teeth move in a figure eight motion to grind the feed before it is swallowed. Sharp points prevent a horse from chewing in a proper manner. Horses with sharp points adapt to chewing on one side of the mouth or chew in a misaligned pattern. Inadequate chewing allows abnormalities to form in the mouth leading to inadequate nutrition. Hooks can form on the first upper premolars and ramps can form on the last lower molars. Uneven wearing of the molars places strain on the temporomandibular joint (TMJ joint) and causes severe pain to the horse. Excessive pressure placed on one tooth, causes loosening of the periodontal ligament and potential fracture of the tooth.

When horse's teeth are floated, the sharp points on the outside of the upper cheek teeth and on the inside of the lower teeth are removed. A horse's tooth surface should never be completely smoothed when floated. The tooth surface has to maintain some irregularity so feed can be ground. Examination of the incisors is commonly overlooked during oral exams. Incisor misalignment leads to inhibited contact of the molars. Many incisor misalignments are easily fixed with a light skimming of the incisors.

Wolf teeth are small premolars located on the upper dental arcade behind where the bit sits. These teeth are not deeply attached to the jawbone and pressure applied by the bit to these teeth is significantly painful. It is recommended that wolf teeth be removed around 2 years of age prior to starting the horse in training.

Signs of dental problems can include excessive salivation, tilting the head while eating, dropping hay (quidding), or slow to finish their feed. Dropping of grain is less of a concern because pieces of grain are smaller pieces of hay or grass. Behavior changes including fussing with the bit, poor self carriage, avoidance of being bridled, head tossing, and misbehaving with a tight noseband can be indicative of dental problems. Horses can endure significant amounts of pain (fractured tooth, periodontal disease, etc.) while eating so dental pain is not always evident. Prevention is the key to dentistry. Dentistry is as important to the equine athlete as nutrition and training. Ensure that your horse's mouth is checked at least once a year.

Contact Brandon Equine Medical Center at 813-643-7177 or email info@brandonequine.com with any questions regarding this topic.

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