

## Equine Dentistry

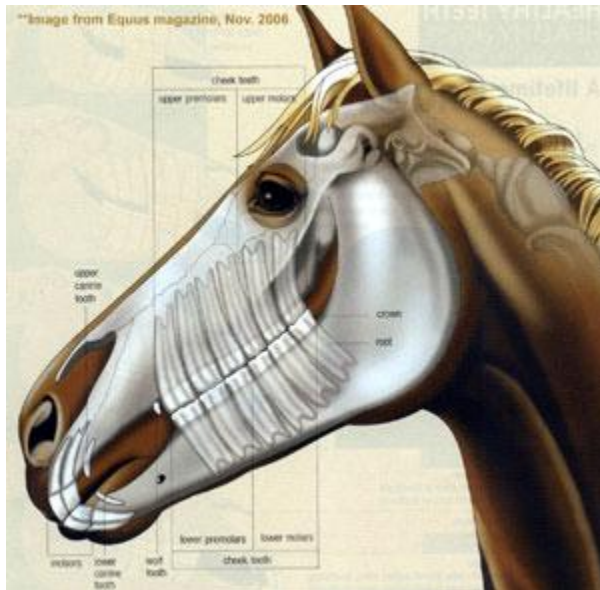
By Dr. Jessie Evans

Bend Equine Medical Center

Oral examinations are important for the health and well-being of your horse. To understand why routine dentistry is essential for your horse, it is first important to understand the horse's oral anatomy and physiology.

### Anatomy and Physiology:

Horses have two different sections of teeth in their mouth – incisors, which are the teeth at the front of the mouth (6 incisors on top and 6 incisors on the bottom), and premolars/molars or cheek teeth. The incisors are responsible for biting or grasping grass or hay while the cheek teeth are responsible for grinding feed. Horses may also have canines and wolf teeth located in the gap between the incisors and the cheek teeth. The canines (fighting teeth) and wolf teeth do not serve much of a purpose in the modern day horse.



Horse's teeth are described as hypsodont, meaning that their teeth erupt continuously. The reserve cheek teeth, as seen in the photo to the left, are ground down throughout their life. Geriatric horses, therefore, begin to run out of teeth as they age and will lose teeth as the anchoring roots diminish. Another important characteristic of the horse is their chewing pattern. A horse chews in a circular motion with the lower jaw grinding against the upper jaw. Irregularities of the horse's teeth can interrupt this motion. Proper occlusion of the cheek teeth is essential for adequate grinding and therefore digestion of feed.

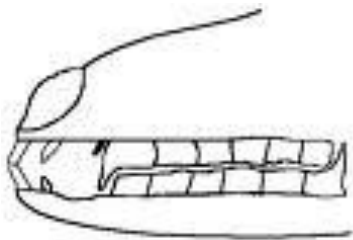
### What are common dental abnormalities and why do they occur?

The horse's unique oral anatomy can lead to multiple problems. First, their mandible (lower jaw) is narrower than maxilla (upper jaw). Again, their chewing motion is typically circular, with the lower jaw grinding against the upper teeth.

Sharp points will tend to form on the outside of the upper cheek teeth and the inside of the lower cheek teeth as the inside and outside of these teeth are ground down, respectively. These sharp points can result in ulceration and laceration of the horse's cheeks and tongue. A routine dental typically consists of grinding down the outside of the upper cheek teeth and inside of the lower cheek teeth to remove these sharp points and, therefore, increase comfort level in the horse's mouth.



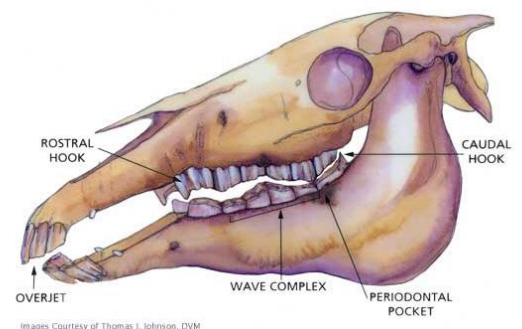
Another commonly seen problem in the horse's mouth is due to malocclusions of the teeth and jaw. It is not unusual for a horse's teeth to be slightly misaligned, causing the lower jaw to not meet perfectly with the upper jaw.



The incisors may or may not be affected. If the incisors are well-aligned, the only signs of this condition will be hooks located on the first and last cheek teeth. These hooks will either be on the front of the upper cheek tooth and on the back of the lower cheek tooth, or vice versa depending on the anatomic abnormality. Typically, lowering these hooks annually will be adequate to remove excessive tooth length and prevent associated ulcers on the apposing gingiva.

If the incisors are affected, you will see either an overbite (brachygnathism or parrot mouth) or an underbite (prognathism or sow mouth) of the front teeth. Depending on the extent of overlap, maintenance of this oral abnormality may need to be addressed more frequently than once annually.

A wave mouth is another commonly seen abnormality. A wave results in difficulty with mastication and occasionally oral discomfort. The "longer" teeth in a wave mouth with continually grind down the opposing teeth and, if not kept in check, can completely obliterate the opposing teeth and ulcerate the gingiva. With dental floating, the high teeth are lowered to allow the low teeth to grow. Although annual dentals will prevent a wave from worsening, a wave mouth is not typically ever "corrected", as they will always trend toward a wavy mouth.



**How often do my horse's teeth need to be floated?**

Every horse should have their mouths evaluated annually. Most horses will need to have their teeth floated once a year. This is approximately the length of time it takes for their cheek teeth to form points that need to be filed. Some horse's are blessed with better mouths than others and can go a longer period of time between floats. Horses with severe waves or anatomic abnormalities (overbites, underbites, cheek teeth malocclusions) may need to be floated more frequently than annually. Your veterinarian will be able to tell you how often each of your horse's need to be floated with a quick oral exam. Ask your vet to see inside your horse's mouth so you can better understand their oral anatomy and where their problems arise. You should also have your horse's mouth evaluated if you ever notice biting problems, difficulty with mastication (quidding), weight loss, episodes of esophageal obstruction (choke), colic, or head tossing.