

EOTRH: What Does it Mean?

Equine odontoclastic tooth resorption and hypercementosis, or “EOTRH”, is a painful disease of the incisor teeth most often seen in older horses. The disease begins by the body resorbing the bone and soft tissue around the roots of the incisors (and sometimes the canines). This resorption leads to spacing between the gum line and tooth, allowing food and debris to become trapped which leads to infection within the gum pockets. Infections here can destroy parts of the tooth root and soft tissue structures, which hold the teeth in place. This underlying infection and increased inflammation of the gum leads to the proliferation of the tooth cementum (or enamel) along the gum line in attempts to stabilize the tooth. Unfortunately, once this process has started it only progresses, leading to the teeth falling out or fracturing, and continues to be painful for the horse.

This disease is typically seen in older horses over the age of 15 years old. EOTRH is believed to have some risk factors such as horses that chew less often (not able to have constant grazing access) and horses that concurrently suffer from Endocrine diseases such as Equine Metabolic Syndrome or Cushing’s disease. This is due to a decreased immune system and higher concentration of circulating Insulin and ACTH.

Clinic signs of this disease are often hard to detect in the early stages due to the low-grade level of pain compared to when the disease is advanced. Some early signs of incisor discomfort are the unwillingness to grab hard treats with their front teeth. These horses may also try to use their lips for grasping food or grazing to help avoid contact with the incisors. A “smiling” face (when a horse lifts its upper lip at work and rest) can be a common sign in EOTRH as well to try and help alleviate pressure on the teeth. In more advanced disease, head shaking, unwillingness to take a bit and weight loss due to decreased eating can be seen due to the level of pain these horses are experiencing.

The inflamed gums and the hypercementosis along the gum line can be seen surrounding the infected incisors as EOTRH progresses. These teeth may also become loose and sensitive to oral examination. These signs along with a complete dental exam and possible dental radiographs are the definitive way to diagnose EOTRH. Unfortunately, this disease is not reversible and once there is radiographic evidence or changes to the integrity of the teeth, there is not much that can be done to slow the process.

The recommendation for advanced EOTRH is to have the affected incisors removed. Removing the diseased incisors allows for pain relief and it may also help prevent the disease from affecting the neighboring teeth if removed soon enough. These horses that lack incisors can cope extremely well with only a diet change to help manage them after surgery. After surgery, soaked grain meals followed by either hay stretcher pellets or a complete pelleted feed are recommended to ensure a rationed diet is available. Most of these horses learn to use their lips and tongue to help grasp grass and hay while grazing. Some even, can also go back to being ridden though their tongue often sticks out through their gums. It has shown however, that horses with advanced EOTRH who have their incisors removed live a happier good quality life.

A good way to help identify the clinical signs early in EOTRH is by having your horse receive regular, yearly dental examinations by your veterinarian. Regular dental maintenance can help not only keep your horses mouth comfortable but also help monitor for any signs of disease presence progression.