

Equine Odontoclastic Tooth Resorption and Hypercementosis (EOTRH)

by Dr. Amelie McAndrews

What is EOTRH?

Equine Odontoclastic Tooth Resorption and Hypercementosis (EOTRH) is a recently recognized, painful condition most often found in older horses. This disease mostly affects incisors and canine teeth, but can affect molars as well.



Severe EOTRH

In this disease, the body starts to resorb the affected teeth. The teeth then try to regain strength by laying down more calcified tissue (cementum) around and in the teeth. The teeth can't keep up in some places and lay down too much calcified tissue in other places. This calcified tissue is not as strong as the tissue it is trying to replace and the teeth sometimes become loose, fractured, or fall out. This allows bacteria to enter the tooth and the surrounding structures, causing gingivitis (inflammation in the gums) and pulpitis (inflammation in the pulp horn- live part of the tooth).

What causes EOTRH?

The cause of EOTRH is unknown at this time. There is a theory that some older horses get the disease from abnormal wear, but this has not been proven. One study was performed to see if affected horses have abnormalities in several different hormone levels, but did not find a correlation. The study did find that mostly geldings are affected.

What are the signs of EOTRH?

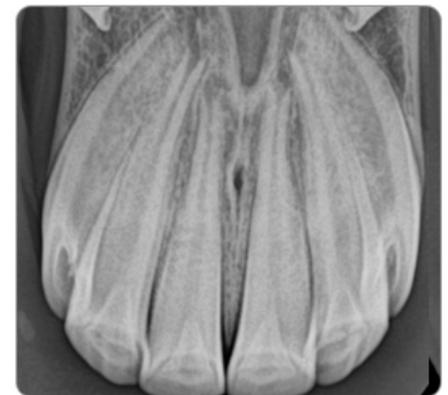
EOTRH is a painful condition. Signs can include difficulty chewing, decreased appetite especially for grazing, rubbing the incisors, pain on pressure of the teeth, irritability when being ridden, weight loss, fractured or missing teeth, and a bulbous, red, or recessed appearance to the gums. However, many horses are very stoic. This disease has a very gradual progression, so many horses have learned to live with the pain, adapt to it, and show no outward signs of pain. The goal is to treat the disease before they exhibit the more obvious signs described above.



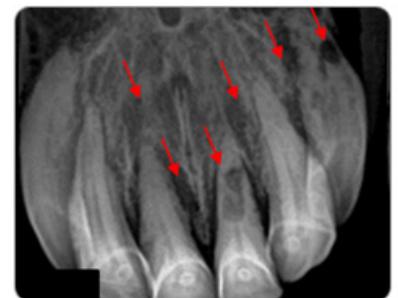
Moderate EOTRH

How is EOTRH diagnosed?

EOTRH is diagnosed by radiographs. Most of the disease process occurs under the gums, making radiographs necessary. Affected teeth have distinctive abnormalities on radiographs. This includes resorptive lesions, where the tooth is dissolving, and a bulbous appearance, where the body has laid down extra calcified tissue.



Normal



Moderate resorption (red arrows)

Continued...



*Severe hypercementosis (yellow arrows)
Severe resorption (red arrows)
Fractured tooth (green arrow)*

How is EOTRH treated?

Unfortunately, because the cause of the disease is unknown, there is not a way to stop the disease process in affected teeth. The only proven treatment is extracting the affected teeth. The number of teeth that need to be extracted is entirely related to the stage of disease. As the disease becomes more progressive, all of the incisors may be affected and need to be extracted. Having all of the incisors extracted at once eliminates the entire source of pain, subjects them to only one surgery, and eliminates the cost of multiple procedures.

These horses are much more comfortable and happier after the extractions. Most owners report that they didn't realize how much pain their horse was in until they see the horse's change in personality after the surgery. These horses go right back to eating after surgery, even after having all of their incisors extracted. They can even go back to grazing, as they learn to use their lips to tear the grass. Riding is also fine once the incision has healed and you will find you have a much happier riding partner!