

EOTRH

Client Information Sheet

What is EOTRH?

“Equine Odontoclastic Tooth Resorption and Hypercementosis” is a disease most commonly affecting the incisors and canines of horses over 15 years of age. It describes a resorptive process, where the affected teeth are eaten away by the body’s own cells (odontoclasts) and in an effort to counteract this, excess tooth material called cementum is often laid down (hypercementosis).

Why does it happen?

There are a few theories about why EOTRH happens and the general understanding is that the biomechanical forces on the periodontal ligaments (which attach the teeth to the bone) are increased in older horses due to the shape of their teeth and there is also secondary involvement of micro-organisms (bacteria) that contributes to disease progression. 1 As it is the body resorbing its own dental material, there is likely an autoimmune component but the mechanism isn’t well understood.

How do we diagnose EOTRH?

EOTRH is definitively diagnosed on X-rays, usually taken when we see changes to the external appearance of the teeth (gingival recession, swelling and periodontal disease common with the disease) or a change in oral behaviours (difficulty chewing or biting down onto carrots, bad breath, biting problems, head shaking)1. EOTRH is a very painful condition due to both the destruction of the normal tooth structure including potentially the nerve supply to the tooth itself and also the secondary infection and inflammation.



Top picture: External appearance of EOTRH showing draining tracts where infection has burst out of the gums (red circles)

Middle picture: Radiographic appearance with majority resorptive lesions (black stars)

Bottom picture: Radiographic appearance with hypercementosis (white stars)

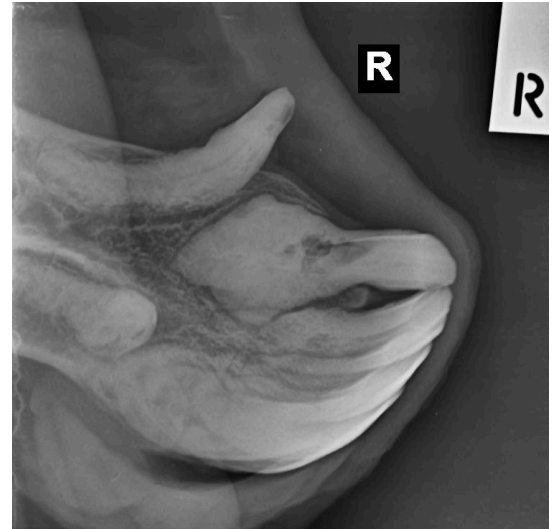


What are the treatment options?

Unfortunately, at this time there are no known treatments to stop the progression of the disease and repair the damaged teeth. The only known and accepted treatment is extraction of the affected teeth when the destruction and pain associated begins to clinically affect the horse (severe changes present on x-rays and/or the presence of clinical signs). We often do the carrot test to gauge comfort levels as well of these teeth.

What will my horse be like post extraction?

Horses can still graze, drink, eat hay and function completely normally post extraction (although hay bags with small holes and very short grass may pose a challenge). Most owners report the horse has a better demeanour, appears more comfortable and gains weight after the surgery. Many horses continue to perform in their ridden careers as well. The most noticeable difference after the surgery is that if all the incisors are removed, the tongue will poke out of your horse's mouth. This is of no consequence and is purely cosmetic (and actually pretty cute!).



References:

1. Hole, S. and Staszky, C. (2016). Equine odontoclastic tooth resorption and hypercementosis. Equine Veterinary Education, 30(7), pp.386-391