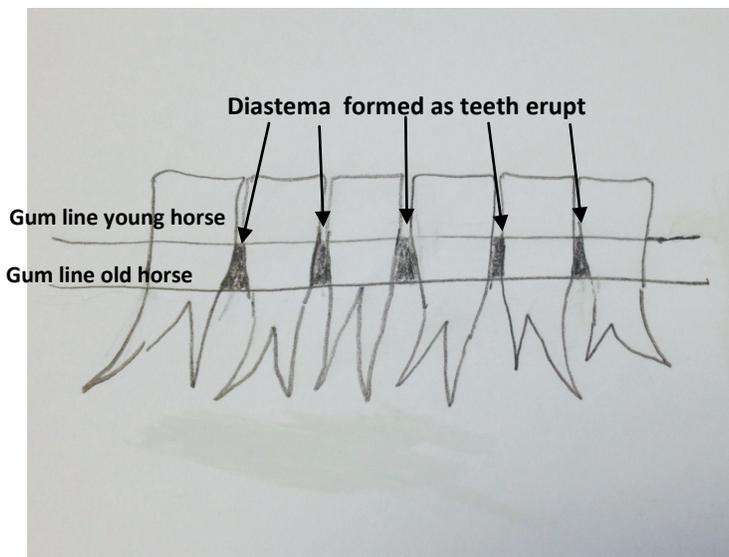


Periodontal means around the tooth and includes the bony socket (alveolus) cement (outer portion of tooth), periodontal ligament and the gingivae. Each tooth is independently and firmly attached to the bony structure (alveolus) by bundles of connective tissue referred to as the periodontal ligament.

As occlusal crown is lost due to wear (3-4 mm a year after 9 years of age) the tooth erupts a narrower reserve crown. The eruption of intermittently narrow cheek tooth crowns may be a factor in the increase incidence of periodontal disease in older horses. The integrity of the once tightly packed battery of teeth may be lost. The interproximal spaces between two adjacent teeth increase in size forming **diastema** and may allow the areas to trap food and predispose the cheek teeth to gingivitis and periodontal disease.



Diastema cause pain as feed material is trapped in the spaces between the teeth allowing for infection and destruction of all of the above mentioned periodontal structures. Unaddressed, this process will destroy the teeth all the way down to the roots. Symptoms of diastema include foul breath, packing of food to one side of the cheek, dropping hay or quidding, and in some cases weight loss, esophageal choke, and pelvic flexure impaction due to inadequate chewing and water intake due to sensitivity from oral pain.

Diagnosis of diastema requires care. For this reason it is necessary to have an adequate light and employ the use of a dental mirror. Food fibers are found between the margins of the teeth and cleaning can cause a great deal of resentment even in the sedated horse. Multiple diastema or “diastemata” can occur in different sites so it is essential to examine the entire mouth. Radiographs are very useful in determining how much damage has been done as well as diagnosing secondary complications such as sinusitis or other boney infections.



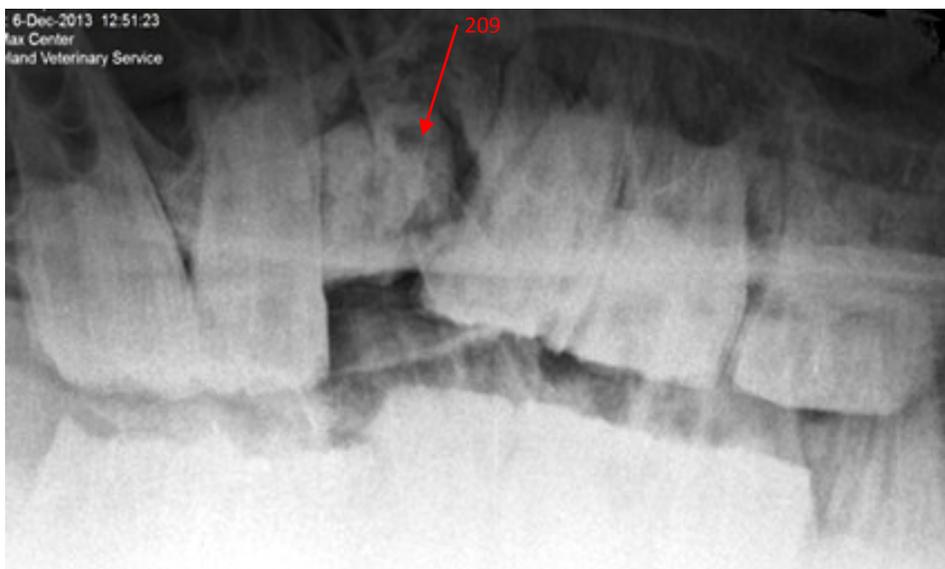
Treatment

Prevention is better than treatment. Regular checking on a yearly basis will allow us to keep the horses gum line healthy. Once gum recession and loss has occurred, it is not possible to undertake a treatment regime that will result in re-attachment of gum and a reduction of gingival pocket size in the horse. In horses with major irregularities of wear and advanced periodontal pocketing, treatment is aimed at restoring, as close as possible, normal or near normal occlusion. Loose teeth should be extracted, sometimes in stages (not all work should be done at one time for the comfort of the animal).

Periodontal pockets can be irrigated and opened where possible, i.e. enlarged as to discourage food impactions in these areas. In many cases, the diastema is rigorously flushed under high pressure and packed with dental impression material and antibiotics after a radiographic examination of the root structures.

The consequences of not following up or closely examining diastema can be very detrimental to the horse and lead to complications. The following radiograph is from a recent case of a 20 year old quarter horse that showed some Infundibular decay of its 209(middle upper molar on the left) with some feed packing. After the initial dental, the horse was not seen for 3 years. During the last 6 months the horse developed an odorous nasal discharge and an appointment was made for it to be checked. The oral exam revealed that the crown of the 209 tooth had broken off. Severe feed packing was found and the surrounding teeth had shifted around the 209 reserve crown causing it to be impacted.

The remaining 209 was extracted orally. This required a maxillary and intra oral nerve block along with careful elevation with numerous specialized tools taking over one and half hours. The tooth was removed successfully intact, but unfortunately the boney socket had decayed to the point of making a direct communication with the nasal cavity. This is called an oral-nasal fistula and was confirmed by the use of an endoscope. Initially this was debrided and packed with dental impression material. However, to completely “plug the hole” we will probably have to surgically close the defect if repeat cleaning debridement and packing does not work.



In closing, I would like to make the final point that equine dentistry is no longer just “going in and knocking off the points.” We are at the point now of making these horses much more comfortable than in the past and I am committed to the most up to date methods to see that it is done.



Thanks!—for allowing me to provide services for your horse(s) this past year!

I am also available to do seminars and dental demonstrations at your facility.

If you have any questions please feel free to contact me.