Diastema

These images are taken inside a horse’s mouth using our dental endoscope; they show one of the most painful kinds of dental disease seen in equines.

The images show equine diastema with periodontal disease in the form of pockets in the gum between the cheek teeth.

Horses have six cheek teeth which have roots angled to push the crowns of the teeth towards one another to form a single functional grinding unit to chew their food. If a horse’s teeth develop too far apart or do not have sufficient angulation there will be spaces between the cheek teeth which trap food material when the horse eats. These spaces are termed “diastema”. The trapped food is forced into the gum causing periodontal disease; the gum recedes and pockets form. Acid and bacteria from the rotting food damage the horse teeth and gums. This condition is very painful for the horse and is associated with slow eating, quidding (dropping) of half-chewed food, behavioural problems and head shaking.

Deep periodontal pockets can extend to the tooth roots resulting in root infection and death of the tooth or into the sinuses causing sinusitis. Infection may also spread into the bones of the mandible or maxilla resulting in osteomyelitis.

Diastema can also develop in older horses as their teeth become smaller with wear and no longer fit together or in horses where the teeth are displaced. Diastema most commonly occur in the teeth furthest back in the mouth and are difficult to see, we use a dental endoscope to image these lesions allowing us to assess them fully and also show owners the lesions in their horse’s mouth, helping them understand their horse’s dentition.

In diastema without significant periodontal disease, treatment involves regular dental rasping to prevent focal overgrowths, sharp enamel points and other wear abnormalities and may involve power floating. Where food is trapped, it can be removed and flushed away. Where deep pocketing occurs, a deep clean with the periodontal machine in our hospital, will allow all the infected food and tissue to be removed, the diastema may need to be opened or fully widened and packed to prevent further food accumulation. Regular ongoing care is required to manage this condition and prevent periodontal disease occurring at periods of 3-6 months.
A diastema during widening, trapped food has been removed and the gap between the teeth is opened up using a motorized burr. There is a risk of damaging the tooth by cutting into the pulp canals and should only be carried out by veterinarians with advanced training.

This is a diastema after widening, cleaning and packing with dental putty.

We run dental clinics at the Markeaton every Tuesday afternoon for dental treatments including rasping, power work, periodontal and diastema treatments and dental endoscopy.