

## Diastemata

The 24 cheek teeth are designed to grind forage for up to 16 hours a day. These teeth erupt and are ground down continuously and those in each quadrant of the mouth act as a single grinding surface without spaces.

A diastema (plural, diastemata) is defined as a gap between teeth. Diastemata in the normally tightly fitting cheek teeth results in food entrapment. The stagnant food leads to painful periodontal disease (inflammation of the gums). If left untreated this can lead to the loosening of teeth, tooth root infections, sinusitis or food tracking up into the nose.

**40-50% of horses suffer from diastemata. They are most common in older horses. It's our most commonly treated dental disease.**

Diastemata can result for many reasons:



With older age, teeth have erupted to the level of the slightly narrower root portion of the tooth. Displaced (out of line) or rotated teeth- both are developmental defects, more common in breeds with small or dished faces e.g. miniatures. Teeth drifting apart, towards the space remaining following a tooth extraction. The teeth have erupted with diastemata between them, perhaps because the horse had grown bigger than the relative size of its teeth or erupted with out angulation. Caries (decay) of the teeth which rots tooth away creating diastemata between them.

Periodontal disease is very painful and horses often present with quidding (dropping of balls of hay). Some horses 'pull faces'. Subtle signs e.g. eating less or weight loss are often attributed to old age. Symptoms are commonly seen during winter as long forage is more likely to become trapped between teeth than grass.

Diastemata are diagnosed at a routine oral exam, recommended every 6-12 months. To perform a thorough examination, a headtorch and mirror is essential; diastemata can be easily missed. Sedation is useful for fidgeting horses.

Treatment is carried out using sedation, pain relief and local anaesthetic in our clinic and involves removal of trapped food with the guidance of the oral endoscope camera that can view into the deepest pockets. Widening of diastemata is sometimes required to release entrapped food. The cleaned deeper pockets are sometimes packed with a protective putty whilst the gum heals beneath. Tooth overgrowths are floated (reduced) using powertools in order to balance the pressures on the teeth, reducing tooth drift. Severe cases may require tooth extractions.

**Following a course of thoroughly performed treatment, the prognosis for resolution is very good especially with early diagnosis and action.**