

Diastemata in horses

"One of the horse's most painful dental conditions"

What?

A diastema (plural diastemata, also often called diastemas or diastases) is a space between 2 teeth. When we speak of diastema in horses we usually mean spaces between the molars of the horse.

In healthy horses, all the molars (6) that form 1 row of molars fit very closely together. Each row of molars thus functions as one functional unit. A horse suffering from diastema has abnormally large spaces between one or more consecutive molars. These spaces quickly fill up with food particles.

Diastemata are most common in the lower jaw, especially between the back molars but this condition can occur between all teeth. The diastemata in themselves are not painful but the accumulation of food in these spaces causes an often very painful inflammation of the gums and underlying tissues (periodontitis).



Symptoms

Horses are masters at hiding (chronic) pain. Also with regard to dental problems, it is often very difficult to recognize the abnormalities at an early stage. Many of these horses show no or hardly any complaints.

Horses suffering from diastema are generally not in an optimal condition. They often eat slower than other horses and seem to suffer most from pre-wilted haylage or silage grass. Often a bad smell coming from the mouth is noticeable. In many cases the horse will 'quid'. This means that the horse will drop partly chewed feed from its mouth with a certain regularity. The 'quidding' usually gets worse when the horse comes back to the stable in autumn.



Origins

Different forms of diastemata can be distinguished. These patients can be divided into 3 groups

- Juvenile diastemata (young horses)

The build and genetic background of your horse may cause the molars not to grow sufficiently towards each other. Especially the last molars (which also develop later on) are important in 'pushing together' the row of molars. It also happens mainly in very small and very large breeds where the teeth are no longer in proportion with the size of the skull.

These horses typically get symptoms at a (very) young age.

- Senile diastemata (old horses)

As horses age, the circumference of the clinical crown (the part of the tooth that is visible in the mouth) slowly decreases. As a result, there is slowly more space in the mouth and possibly also between the teeth. The size and

shape of the teeth as well as the angle in which they are anchored in the jaw determines the sensitivity to the development of this condition.

- Other (all ages)

Horses that have teeth missing or where teeth have been moved or broken often also have diastemata. The same goes for horses with very large hooks or dominant molars. Because of the great pressure on these elements, a diastema will often occur here as well. The teeth will be pushed apart, kind of.

What happens in the horse's mouth?

During chewing, food will be squeezed between the teeth. This food is caught between the teeth and decomposes quickly (thanks to the bacteria in the mouth). The 'rotten' food (usually hay/pre-wilted haylage) causes a serious inflammation of the gums (periodontitis). In severe cases, this infection penetrates deep into the jaw. This affects not only the gums but also the tooth and its anchoring (the periodontal ligament). At an advanced stage, the molars in question are often (partially) loose. Diastemata is one of the most painful dental conditions in horses.

Because of the painfulness, the horse will often also exhibit abnormal chewing patterns with further deterioration and/or the development of secondary dental pathology.



Treatment

In addition to essential routine dental treatment, patients need targeted treatment for these problems. In any case, the spaces between the teeth must be cleaned so that all rotting food is removed. This is done with specially developed flushing devices (water pressure) and compressed air. Then, depending on the type and number of diastema, the further treatment is decided. This can range from temporarily filling the spaces with special fillings, enlarging the diastema (so that the food can also be released) to pulling out too severely affected and/or loose molars. Horses with diastema are in a lot of pain in the mouth. In addition, it is very important that the horse stands still during the treatment. The treatment is therefore always carried out using sedation and, if required, supplemented with local anaesthetic.

Management

Horses suffering from diastema often thrive best on tender (short) grass, supplemented with concentrates and/or mash. Wet pre-wilted or long fibers silage aggravates the symptoms. Horses in very poor condition should be given a further individually adjusted ration (e.g. more fatty diet). We recommend giving easy-to-chew food (strucomix, senior food, fibbernuggets, etc.). Some horses with diastema are very willing to have their mouths rinsed with water. Temporary rinsing can also be done with a diluted chlorhexidine solution as disinfection. Of course, the correct diagnosis and timely and professional treatment of your horse remains the key to less painful teeth.

For more information about this disorder or other dental problems in horses, you can always contact us.



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