



Oakham Veterinary Hospital – Equine Gastric Ulcer Syndrome and Gastrosocopy

What are the symptoms of EGUS?

One of the challenges of this condition is the variability and vagueness of the symptoms, which can include some or all of the following; reduced appetite, slow eating, poor physical condition, dullness, changes in attitude such as sourness or irritability, colic, poor performance and reluctance to work. However, at times it is difficult to attribute these signs specifically to gastric ulceration. Horses most at risk from developing ulcers include those in high intensity training and those undergoing any form of stress such as long periods of transportation or being on box rest. Another high risk group are young foals, particularly if they are sick or receiving any medications.

What causes the ulcers?

Horses are designed to have their heads down grazing for up to 16 hours per day. However, this is often not compatible with the training demands placed on the modern sporthorse. An important feature of equine gastric ulcers is that horses secrete gastric acid continuously, whether or not they are eating. An adult horse will produce approximately 1.5 litres of gastric acid per hour, and with restricted access to food, continued secretion means the pH level can rapidly become very acidic, and ulcers can begin to develop. In contrast, horses constantly eating hay or grass have a higher average stomach pH providing a much healthier environment.

The horse's stomach is effectively divided in to two portions, the lower and upper regions. The lower part of the stomach has gastric pits containing the glands that secrete hydrochloric acid. The lining of the lower part of the stomach is less susceptible to acid attack than the upper part, which is lined with squamous mucosa that has no secretory or absorptive function and is therefore vulnerable to acid attack. Gastric ulcers usually form when the lining of the upper part of the stomach is exposed to acid for extended periods of time i.e when a horse stands has restricted access to food and cannot graze/eat continuously.

What are the treatment options?

If a horse is suspected of having gastric ulcers, gastroscopy will confirm the presence, severity and location of the ulceration. Although the most common location for ulcers is the upper region of the stomach, ulcers have been known to develop in other areas, including the lower portion and the duodenum. Ulcers are graded from 0 to 4 reflecting the severity of ulceration, with grade 0 being a normal healthy stomach, and grade 4 demonstrating extensive lesions with areas of apparent deep ulceration.



Studies have shown the most effective treatment is the acid inhibitor, omeprazole, commonly known as GastroGard. This is the only licensed treatment for equine ulcers in the UK. An oral paste, it is a potent inhibitor of gastric acid secretion and is highly effective in healing gastric ulcers. It takes three to five days for a steady state of acid suppression to be reached and total healing time is usually between two to four weeks, although severe cases can take a little longer.

A full course of treatment is usually prescribed for 28 days, with one treatment per day. The horse can be taken out of work during this period, but it is not always necessary, and really depends on the individual circumstances and preference of the owner/rider.

How can I prevent the ulcers returning?

Many owners and riders note a significant improvement in their horse, in a very short period of time. However, once the ulcers have healed, it is vital that changes are made to the horse's management to prevent their return. The key is to remember that horses are designed to be 'trickle feeders' so it is important to try and emulate the horse's natural environment as closely as is possible. Free access to hay and daily access to grazing can play a significant role in the prevention of ulcers in horses. Administration of hard feed in smaller quantities, more frequently is also highly recommended.

We know that where horses have been turned out for rest for a few weeks, the incidence of ulcers in these animals will be minimal. However, once brought back into work, and particularly if stabled full time, a significant proportion will develop ulcers within three to four weeks of stabling and exercise.

In addition to management modifications, or where the regime already emulated a more natural environment, horses at high risk of recurrence may also require an ongoing preventive dose of GastroGard to keep them clear of ulceration.

If you have any further questions or suspect your horse may suffer from EGUS please contact the office and ask to speak to one of internal medicine specialists who are experts in this field and will be able to advise you on the best course of action