

Uncovering the hidden health threat.

Risk factors include:

Intensive exercise

During strenuous training, blood flow to the stomach decreases, and increased pressure in the abdomen pushes acid up into the squamous (non-glandular) section of the stomach. Continued exposure of this sensitive squamous section to acid raises the chance of acid erosion and thus ulceration.

Diet

Horses have evolved to eat constantly, producing stomach acid 24 hours a day. If fed infrequently, this stomach acid continues to build up without ingested feed to absorb it, thus increasing the acidity of the stomach.

TIP Allowing free-choice access to grass or hay and feeding more frequently may help to buffer the acid level in the stomach. Cutting down on the use of high carbohydrate diets may also be helpful.

TIP Allowing free access to fresh water is a simple step towards reducing the risk of ulcers.

Illness

Gastric ulcers can occur in response to physiological stress. For example, shock, respiratory disease and traumatic injury may play a role.

TIP Ask your vet about any medications or procedures your horse may receive, and be aware of the symptoms of EGUS to look out for.

Stress and travelling

Transporting horses is linked to the development of gastric ulcers, as the psychological distress affects stomach acidity.

TIP Allowing access to or visibility of other horses may reduce stress in the stable or during transportation. Installing a travel mirror in your horse box or trailer may also be helpful.

TIP Ask your vet about preventative measures you can take before and during anticipated times of extra strain and stress.



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Diagnosing gastric ulcers
A guide to equine gastroscopy

Symptoms of gastric ulcers can vary greatly between different types of horse. For example, sports horses may show exercise intolerance, whereas eventers may be reluctant to gallop, with dressage horses showing a poor tolerance of lateral work or sweating and stopping.*

Weanlings and foals are also at risk from developing gastric ulcers, particularly at times of stress such as illness, and excessive handling. The common symptoms are listed as:

- Colic
- Excessive rolling
- Lying on their backs
- Restlessness
- Poor appetite
- Intermittent nursing
- Poor weight gain
- Teeth grinding
- Excessive salivation
- Diarrhoea

† Murray MJ, Eichorn ES. Effects of intermittent feed deprivation, intermittent feed deprivation with ranitidine administration, and stall confinement with ad libitum access to hay on gastric ulceration in horses. *Am J Vet Res* 1996; 57: 1599-160.

* European Trainer, Winter Issue 2007, www.trainermagazine.com, accessed February 2011.

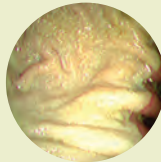




Ulcer grading

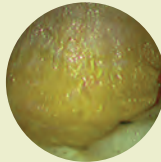
Ulcers vary in severity. The endoscope will allow your vet to tell not only if ulcers are present, but also how severe they are, on a scale graded from 0-4.†

Squamous mucosa



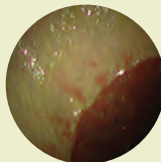
GRADE 0

The epithelium is intact and there is no appearance of hyperaemia or hyperkeratosis



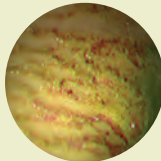
GRADE 1

The mucosa is intact, but there are areas of hyperaemia or hyperkeratosis



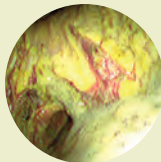
GRADE 2

Small, single or multifocal lesions



GRADE 3

Large, single or multifocal lesions or extensive superficial lesions



GRADE 4

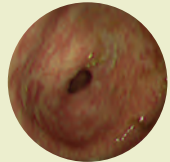
Extensive lesions with areas of apparent deep ulceration

Glandular mucosa



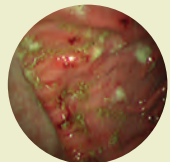
GRADE 0

The epithelium is intact and there is no appearance of hyperaemia



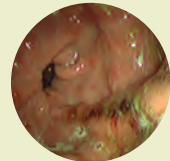
GRADE 1

The mucosa is intact, but there are areas of hyperaemia



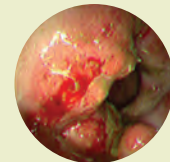
GRADE 2

Small, single or multifocal lesions



GRADE 3

Large, single or multifocal lesions or extensive superficial lesions



GRADE 4

Extensive lesions with areas of apparent deep ulceration or mucosal pathology

† Andrews F, Bernard W, Byars D *et al.* Recommendations for the diagnosis and treatment of equine gastric ulcer syndrome (EGUS). The Equine Gastric Ulcer Council. *Equine Vet Ed* 1999; 11: 252-272.

What is gastroscopy?

Gastroscopy is a painless procedure that allows a trained operator to see live images of your horse's stomach, using a very long, flexible camera device called an endoscope. When inside the stomach, any ulcers can be seen on a video screen.

Why has my horse been offered a gastroscopy?

Many horses do not show outward signs of EGUS, and some of the outward signs could be attributable to other conditions. Gastroscopy is the only way to get a definitive diagnosis of ulcers, and it also allows the vet to see the severity and extent of any ulceration.

What is involved?

To start, a three-metre long endoscope is passed into the horse's nostril, and down through the pharynx, larynx and epiglottis into the stomach.

To achieve the optimal angle to access the pharynx, and avoid potential damage to the scope and horse, the scope is not passed through the horse's mouth.

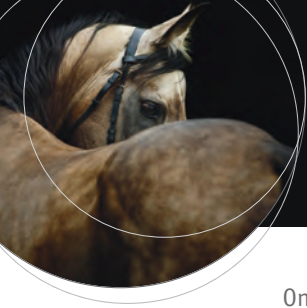
Although gastroscopy isn't painful, a tranquilizer is often used to help ensure that the horse remains calm and relaxed throughout.

The procedure usually takes around 15-20 minutes.

To enable a clear view of the stomach lining, it is strongly advised that horses do not eat for at least 12 hours prior to the procedure.

Water can be given immediately after the gastroscopy, if your vet recommends it, and feeding may recommence within a couple of hours, when the horse is fully alert.





Gastroscopy aftercare

Once the gastroscopy procedure is over, you should follow the advice given by your vet regarding giving food or water.

After the endoscope has been completely removed, your horse can be taken to a stable to recover from any sedation given. If your vet recommends it, water may be given at this stage, but avoid feeding until your horse has fully come round from the tranquilizer, and only on the advice of your vet. It usually takes around 1 hour after the procedure has finished for horses to be fully alert.

If EGUS is diagnosed, you may be prescribed medication to treat it, and your vet will be able to discuss the requirements with you fully.

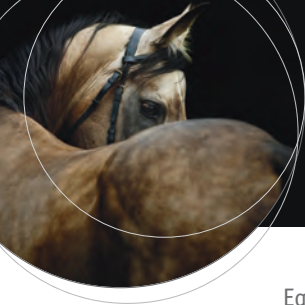
Treatment and reduction of EGUS

Treatment

If your horse is found to have gastric ulcers, your vet may prescribe medication. This is usually administered daily for a period of weeks. During this time, it may be possible for your horse to continue training or competing on your vet's advice.

Reducing EGUS in future

Once the ulcers are under control it is important that management and feeding regimes are optimised to help prevent the recurrence of gastric ulcers. There are several factors that can contribute to the likelihood of a horse getting gastric ulcers, and a number of measures you can take to help minimise the risk to your horse.



What are gastric ulcers?

Equine Gastric Ulcer Syndrome (EGUS) describes the erosion of the horse's stomach lining due to prolonged exposure to the acid produced by the stomach.[†]

Ulcers can vary in size and severity. They are mostly found in the squamous or non-glandular area of the stomach, and can present as single or multiple lesions.

Until recently it was thought that gastric ulcers only affected racehorses. However, through better diagnostics and a more detailed understanding of the disease it has become apparent that all horses are at risk of developing ulcers.

Horses undergoing intense levels of training are more at risk of EGUS; however many leisure horses can also suffer from gastric ulceration.

What are the signs of EGUS?

Signs of ulcers in yearling and adult horses are common, but are not always immediately recognised as EGUS. The symptoms vary greatly between individuals, but the more common clinical signs in adults can include:

- Poor appetite
- Weight loss
- Poor body condition
- Dull coat
- Acute and recurrent colic
- Excessive lying down
- Stretching to urinate
- Poor performance and not reaching expected goals
- Attitude and behavioural changes
- Discomfort on girth tightening
- Resentment of grooming
- Possible link to crib biting



For more information about equine gastric ulcers and how to assess the risk to your horse, visit www.equinegastriculcers.co.uk

Your horse's details

Please complete the following as a record of your horse's gastroscopy

Horse's name: _____

Date of gastroscopy: _____

Vet practice name: _____

Were ulcers diagnosed? Yes No (If no, leave remainder blank)

Grade of ulcers diagnosed: _____

Site of ulcers diagnosed: _____

Treatment details (If given)

Product used: _____

Dosage details: _____

Is a follow-up examination required? Yes No

Date for follow-up appointment: / / Time:

Ulcers present on re-examination? Yes No

Grade of ulcers still present: _____

Site of ulcers still present: _____