



What are Gastric Ulcers?

Gastric Ulcers are erosions of the horse's stomach mucosa (aka stomach lining) that occur as a result of excessive exposure to acid production. Equine Gastric Ulcer Syndrome varies greatly in its severity from mildly inflamed mucosa to multiple large erosions (ulcers) that can cause bleeding into the stomach, all the way up to such severe ulcers that perforate through the stomach wall. Gastric Ulcers can affect any age of horse right from a foal and can occur in any breed.

So what does a horse with Gastric Ulcers look like?

The difficult thing about the majority of horses with gastric ulcers is that the signs they show can be subtle and difficult to recognise. Some of the following signs may be seen in a horse with gastric ulcers;

- Inappetence
- Weight loss
- Poor performance
- A loss in condition - eg poor coat
- Subtle behavioural changes
- Mild low-grade recurrent colic

Foals - excess salivation, teeth grinding, frequently lying on their back and poor weight gain along with reduced suckling and even occasional diarrhoea can all be seen in a foal with gastric ulcers.

How do you diagnose Gastric Ulcers?

Endoscopy of the stomach is currently the only technique to achieve a definitive diagnosis of gastric ulceration in a live horse. The procedure is conducted standing in a sedated horse which has been fasted for 6-12hrs. A flexible endoscope of at least 3m in length is required so all parts of the stomach can be visualised. Unfortunately not many ambulatory vets are capable to carry such a large endoscope and all the associated equipment so most diagnoses are made in a referral hospital.

Response to therapy using an anti-ulcer medication can be used retrospectively to diagnose gastric ulcers, but due to the expense of treatment it may actually be more economical to perform endoscopy to get a definitive diagnosis.



What are the risk factors for Equine Gastric Ulcer Syndrome?

- **Exercise** and regular competition have been shown to be major risk factors for the development of gastric ulcers in the horse. Even non-intensive training has been associated with an increased risk of gastric ulcer development. A study in 2007 showed that between 58% and 100% of all performance horses in work are affected by gastric ulcers to some degree. Bell RW, Mogg TD, Kingston JK. Equine gastric ulcer syndrome in adult horses: A review. New Zealand Vet J 2007; 55(1):1-12
- **Stress** of transportation and stabling are both proven risk factors for gastric ulcer development.
- **Medication** such as phenylbutazone (“bute”) and other non-steroidal anti-inflammatories are known to predispose horses to ulcers by inhibiting gastro-protective factors.
- **Infrequent** feeding has been shown to increase the risk of gastric ulcers due to the fact that the horse was designed to graze pasture all day and have a constant inflow of food into their stomach. As such, their stomach constantly produced acids to help digest the food coming in. When a horse goes long periods without food (such as between morning and night meals whilst it is being stabled) there is nothing in the stomach to buffer the acids being produced - resulting in damage to the stomach lining.

How do you treat Gastric Ulcers?

The treatment of gastric ulcers in the horse is actually surprisingly easy. There are several drugs all the market, all of which are oral medications but the most effective is a drug called Omeprazole (Gastroguard). It is initially administered at a high dose to treat existing ulcers for up to a month and then the dose is lowered and used as a preventative treatment. This drug is all right to use in competition horses as it is approved under all racing and sport horse medication laws, but it is quite expensive.



Can Gastric Ulcers be prevented?

You can certainly go a long way in reducing the likelihood of your horse developing gastric ulcers by bearing in mind the common risk factors and following some of these helpful hints;

- Divide your horse's feed into smaller portions and feed more frequently
- Allow free access to grass or hay
- Consider dividing large hay nets into small ones so they take longer to eat
- Try to reduce high carbohydrate diets
- Consider using ulcer preventative medications during risk periods such as during the competition season or prior to transport

As you can see, the signs of gastric ulcers are often very subtle but many astute owners will pick up on these subtle changes. A common reason for investigation, especially in a performance horse is that the owner feels that the horse is "just not quite right" - in the absence of anything else, gastric ulcers may be the answer. The vagueness of clinical signs seen on physical exam could actually be considered a clinical sign unto itself when considering this disease.