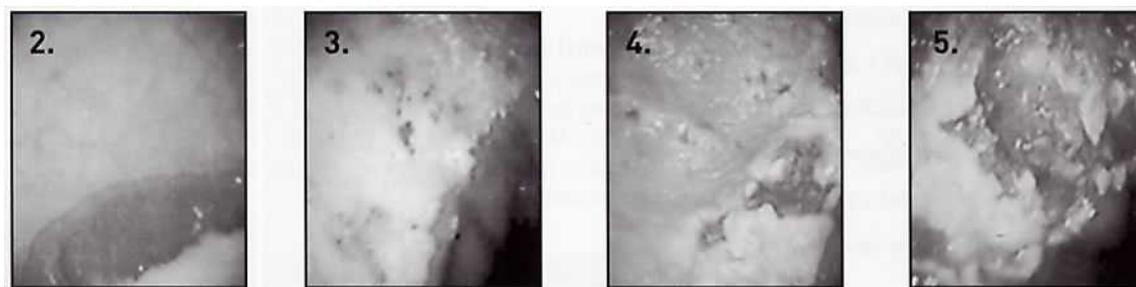


The Role of Aloe Vera Gel in equine gastric ulcer syndrome

There is now considerable evidence that gastric ulcers in the horse are much more common than we would expect. Leading researchers such as M. J. Murray have found that up to 93% of thoroughbred racehorses in training suffer from gastric ulcers. Similar studies have shown an incidence of nearly 60% in both performance horses and foals.



Pic 2 Lining of normal horse's stomach

Pics 3-5 Equine gastric ulcers

Those of you who are not of a delicate disposition [!] or who wish to view these pictures in glorious technicolour can go to the flpuk.info site under Literature/Forever Newsletter/Key Articles.

The Photograph [2.] shows the inside of a normal horse's stomach. The top portion of the stomach is lined with epithelial cells similar to those found in the skin. The lower part is redder in colour and composed of glandular cells, which produce hydrochloric acid.

Ulcers predominantly occur in the non-glandular part of the stomach and are caused through increased exposure to the acid produced in the glandular part. The epithelial cells can be damaged after only a few minutes of exposure. These ulcers [3,4,5] are very similar to the ulcers seen in humans suffering from gastric reflux.

The clinical signs shown by horses and foals suffering from equine gastric ulcer syndrome (EGUS) are not specific since they can be associated with other diseases. The table below lists some of the common clinical signs, which can be associated with EGUS. It is likely that many horses will show reduced performance due to the presence of gastric ulcers, a very significant factor in race and performance horses.

Clinical signs associated with stomach ulcers in horses and foals.

| Adult Horses | Foals |
|---------------------|----------------|
| Poor Performance | Pot bellied |
| Poor Appetite | Diarrhoea |
| Behavioural Changes | Poor Coats |
| Dull | Poor Growth |
| Poor Coats | Salivation |
| Weight Loss | Teeth Grinding |
| Colic | Lying on Back |
| | Colic |

The main causes of EGUS are associated with stress, which can be as a result of a number of management practices.

Feeding Horses in training are in general fed low fibre diets containing a high content of concentrate foods. The horse evolved to browse on high fibre herbage based on grasses and herbs and to do so for many hours each day. Many horses in training are given two or three large feeds daily with only limited access to roughage.

Training Horses evolved to keep on the move constantly and even have additional ligaments on certain joints so that they can sleep standing up. Horses in training are only given limited exercise daily.

Transport Race and competition horses are frequently transported long distances, which can result in stress leading to gastric ulcers.

Stable Management Certain practices can lead to stressful situations resulting in stable vices such as crib biting, wind sucking, weaving and stable walking.

Medication A number of drugs can produce gastric ulcers, probably the most well known are the non-steroidal anti-inflammatory drugs such as phenylbutazone (bute).

Associated Diseases Certain debilitating diseases can lead to the formation of gastric ulcers.

A number of methods are available to help with the diagnosis of EGUS. Firstly it is apparent from the numerous published research papers that one should assume that most racehorses in training and a significant number of performance horses and foals suffer from EGUS.

Although the clinical symptoms associated with gastric ulcers are helpful they are not specific and therefore can only be taken as suggestive requiring further investigation to confirm their existence. Similarly the response to treatment can also be an indicator that gastric ulcers may have been the cause of presenting symptoms.

Definitive diagnosis can only come from gastric endoscopy where the lesions can be confirmed directly. Unfortunately this can be expensive and may require sedation of the horse both of which can produce resistance from the trainer.

When it comes to prevention and treatment it would appear that if trainers would change the management of these horses the majority of cases could be prevented. However these systems have been in place for centuries and it is unlikely that they will be changed.

Drugs which inhibit the production of hydrochloric acid in the stomach such as omeprazole (GastroGard) have been used effectively. Their problem is that they are expensive and are prohibited substances under the rules of racing.

Aloe Vera Gel has been shown to help prevent and heal gastric ulcers in a number of species. In all species where it is not possible to remove the cause, daily administration is required. To help prevent the occurrence of gastric ulcers in horses it is recommended that they are given 120mls daily. In confirmed cases this should be increased to 250mls daily for grade 1, 500mls for grade 2 and 1 litre for grade 3. In cases of confirmed grade 2 and 3 it would be advisable initially to combine a product such as GastroGard with the Gel until healing is complete. The horse should then be maintained permanently on 120mls **Aloe Vera Gel** daily to prevent recurrence.

The Aloe Vera Gel will also have additional benefits for the horse such as improving the immune system, better hooves and coats as well as helping with any skin problems.

Aloe Vera Gel is not only economic to use but also it contains no substances which are prohibited under the rules of racing. It therefore can be given to the horse permanently, which is very different from the situation when drugs are used.