

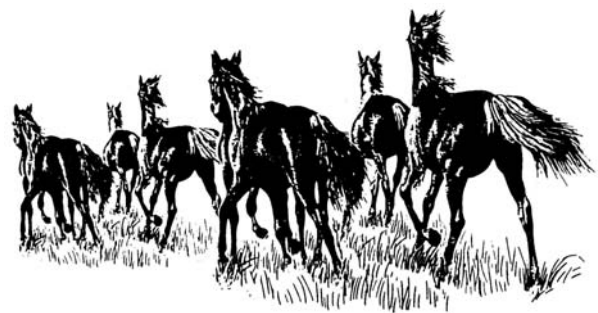
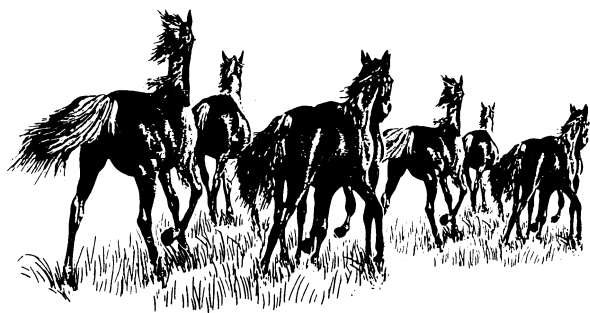


NUTRIFAX
Nutrition News and Information Update



EQUINE GASTRIC ULCERS

THE CAUSE AND THE CURE



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EQUINE GASTRIC ULCERS - THE CAUSE AND THE CURE

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What is an ulcer?

By definition, an ulcer is a break or erosion of the lining of the esophagus, stomach or small intestine. Stomach ulcers are most common and occur mainly in the top, non-glandular area due to prolonged exposure to normal stomach acid..

Studies have shown that as many as 90% of racehorses in training, and up to 60% of show horses are affected by ulcers. Foals are not immune to this ailment as estimates of the occurrence of ulcers have been reported to range from 25% to 50% in foals, most commonly from 3 to 5 months of age. Foals as young as 2 days of age have been documented with Equine Gastric Ulcer Syndrome (EGUS)

Why would a horse develop an ulcer?

By nature, horses are grazers with regular intake of roughage which serves to buffer the normal flow of stomach acid that is continuously produced by horses. The stomach of an adult horse can secrete approximately 1.5 liters of acid rich gastric juice – per hour! With human intervention, horses may be confined to stalls and meal-fed twice daily. This leads to prolonged periods of time without feed to neutralize the flow of acid. Furthermore, high grain rations fed in this manner can actually cause a spike in the production of volatile fatty acids which can also contribute to the development of ulcers.

Stress can be a factor in the likelihood of ulcers. Environmental stressors such as stall confinement, trailering and mixing groups of horses at shows and sales can contribute to the production of ulcers. Physical stress in the form of strenuous exercise, like training and racing, can decrease the emptying function of the stomach, as well as blood flow to the stomach, further contributing to the issue.

The administration of anti-inflammatory medication, such as phenylbutazone, has been shown to decrease the production of the protective mucus layer of the stomach, resulting in an increased incidence of EGUS.

What are the symptoms?

In most cases, horses with EGUS do not demonstrate obvious symptoms of the disease and are sometimes referred to as “silent” ulcers. Subtle indications may include poor appetite, rough hair coat and decreased performance. Abdominal pain will result in more serious cases. In all cases, there is only one conclusive way to diagnose EGUS, and that is with gastroscopy. This involves the insertion of an endoscope, through the nostril, and down the esophagus into the stomach to view the surface lining. Blood work alone is not

always a reliable measure of the condition. Horses with serious ulcers have been recorded with completely normal blood work.

Can ulcers be treated? Even better – prevented?

The answer is yes to both questions – let's begin with prevention. Simply stated, many activities that require horses to interact with mankind can lead to the formation of ulcers. Management issues like meal feeding, sometimes limited to twice daily, stall confinement, limited access to grass or hay, trailering, training and various athletic pursuits may all contribute to the possibility of ulcer formation.

More frequent feeding of smaller meals, with free-choice access to hay or pasture is a good beginning to limit the incidence of ulcers. Horses should be fed no less than 50% of their dry matter intake as good quality hay or pasture. This activity will help buffer stomach acid, thus reducing the possibility of prolonged exposure. Feeding a diet higher in fat and lower in grains that tend to form acid may help in some cases. Daily turn-out and even simple solutions like an object in the stall to play with appear to reduce the stress of stall confinement. Limiting activity which may be stressful to certain individuals, such as training racehorses and high level event horses, may be the best method to reduce the possibility of ulcers. But reality dictates that there will be racing and events, and most horses will require trailering to get to these activities. As a result, diet, feeding and management issues may play a major role in inducing ulcers in horses.

Treatment options

If the presence of stomach ulcers has been verified by a veterinarian with the use of a gastroscope, an effective treatment option is the use of omeprazole, an anti-ulcer medication which suppresses the production of hydrochloric acid in the stomach. This medical treatment option has been shown to heal and prevent ulceration in horses training and racing. A course of treatment over a period of up to six weeks may be followed by a daily preventative dose while horses are racing. A period of lay-up on pasture for two or three months can allow time for ulcers to heal naturally, but the condition is likely to recur upon resumption of the activity that caused the ulcer in the first place. Other treatment options such as stomach buffers and herbal formulas may be helpful in some cases, depending upon the severity of the ulcer or the level of stress on the animal.

Conclusions

Ulcers in horses, particularly stomach ulcers, are very common. Feeding, management and environmental issues may all play a role in the formation of ulcers in horses. Many stress-limiting activities may be implemented to reduce the occurrence of this ailment. If this condition becomes clinically apparent and verified professionally, there are treatment options available to cure stomach ulcers, and together with improved management, prevent their reoccurrence.

References

The material contained within this Nutrifax was compiled from information obtained from numerous articles on the subject. Thank you to all contributors, among them:

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