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Stomach Ache and Poor Performance

This months hot topic is GASTRIC ULCERATION. A huge problem in race, sport, performance and even hack horses, and often not diagnosed in many cases. **UPTO 95% OF HORSES IN TRAINING HAVE GASTRIC ULCERATION.** This article aims to explain why horses are prone to gastric ulceration, possible signs of gastric ulceration, how to diagnose and how to treat and manage ulcers. This article has been written in collaboration with Dr. Craig Mincher, whose speciality is gastric ulceration.

Are gastric ulcers affecting your horse's performance?

Yes they are.

In recent studies it has been shown that up to 67% of endurance horses, 88% of racehorses and 60% of sport horses (show jumpers and eventers) have gastric ulcers. In 2009 a study proved that gastric ulceration in horses had a negative effect on performance. So if we look at the hard facts most sport horses in training and competition most likely have gastric ulcers and their athletic performance will be negatively affected. Not to mention their general demeanour and well being.

Why do horses get gastric ulcers?

There are various predisposing factors. The primary reason is too much gastric acid resulting in an unusually low (acidic) stomach pH.

Horses have evolved as continuous grazers eating a diet of roughage most of the day. This results in a lot of saliva being formed which acts as a natural buffer (antacid) continually entering the stomach. Sport horses require a diet high in digestible energy with a large part of that being carbohydrate based. This results in a very acidic stomach pH and damage to the stomach wall and resultant gastric ulcers.

Exercise also stimulates a hormone called gastrin which secretes even more gastric acid thereby and further causing damage to the stomach wall.

Exercise also causes compression of the stomach and pushes the acidic contents higher up into the unprotected area of the stomach further increasing damage to the stomach wall.

And then of course travel to events, sometimes over long distances, and the stresses of high performance also contribute to the problem.

In summary if we want our horses to perform at the highest level as athletes then unfortunately we have to manage them in this way. General management of sport horses is designed to get the most out of them as athletes but ironically these management methods are also the major contributing factors in the predisposition to contracting gastric ulcers. For this reason management of the problem with medication is often the only solution.

What signs will my horse show with ulcers?

The signs of gastric ulcers can be variable and subtle sometimes. Although the signs are not specific, they often will point to gastric ulcers, which can then be easily ruled in or out with a gastroscopic examination.

- A change in attitude - Is your horse more nervous than usual or less willing to perform? Does he seem grouchy for no apparent reason, does he resent being groomed over the flanks, resent being tacked up when he previously was fine?
- Poor appetite - Is he eating as much as he normally does for the amount of work he's accomplishing? Is he leaving any of his feed uneaten? Does he go to his feed eagerly then back off and lose interest after a few mouthfuls, perhaps appearing 'frustrated' and pacing the box?
- Colic - Is your horse showing signs of low-grade colic, a persistent mild discomfort that may cause him to turn his head toward his flank, lie down excessively, paw or fail to finish a meal?
- Decreased performance - Is your horse not as "fluid" as normal? Could his usually fine movement be described as below average? Is he resentful of going forwards?
- A decline in body condition - Is your horse's coat not quite as sleek and shiny as it once was? Does he look "unthrifty" or just plain poor? Is his coat dry and scurfy?
- Weight loss - Has your horse dropped weight?
- Dull - Is your horse generally lackluster and seemingly without energy?

How do I know my horse has ulcers?

The only way to effectively diagnose gastric ulcers in the horse is with a **gastroscope**. In South Africa there are very few gastroscopes available that reach the stomach of the horse, so diagnosis is often based on general clinical signs. A large number of horses may not show any outward definitive signs however performance and welfare of these horses will still be negatively affected. Most competitive sport horses have gastric ulcers. Gastroscopy is a fairly simple procedure to perform and can be done in the standing sedated horse.



A horse being gastroscoped under standing sedation

What treatments work and are worth spending money on?

If you are going to spend money on a product it is essential that a product that is registered and proven to be effective for both treatment and prevention of ulcers in the horse. There are many different treatments currently used with only one of them being registered and scientifically proven to be effective for both treatment and prevention.

Dietary supplements and antacids have not been registered and clinically proven to be effective for the treatment or prevention of ulcers although there are many products on the market. They may provide temporarily relief and make the horse a little more comfortable however they have not been proven to heal the ulcers and prevent ulcers from developing.

A drug called **ranitidine** is still widely used however it has a very high failure rate. In a study in the USA involving 157 horses, 96% of the horses treated with this group of medicines still had gastric ulcers with 58% of those having severe ulceration. Performance in these horses would most definitely still have been affected.



The gold standard and medicine of choice worldwide is **omeprazole** paste. Fortunately omeprazole paste has been registered for use in horses in South Africa in late 2009. It is the only medicine that has been registered and proven to be effective for the treatment and prevention of gastric ulcers in horses. Omeprazole is what is called a proton pump inhibitor (PPI) and is extremely effective at turning off acid production in the stomach. With acid production switched off the stomach pH can return to normal and an environment conducive to healing is achieved. Omeprazole also prevents the recurrence of gastric ulcers in sport horses.

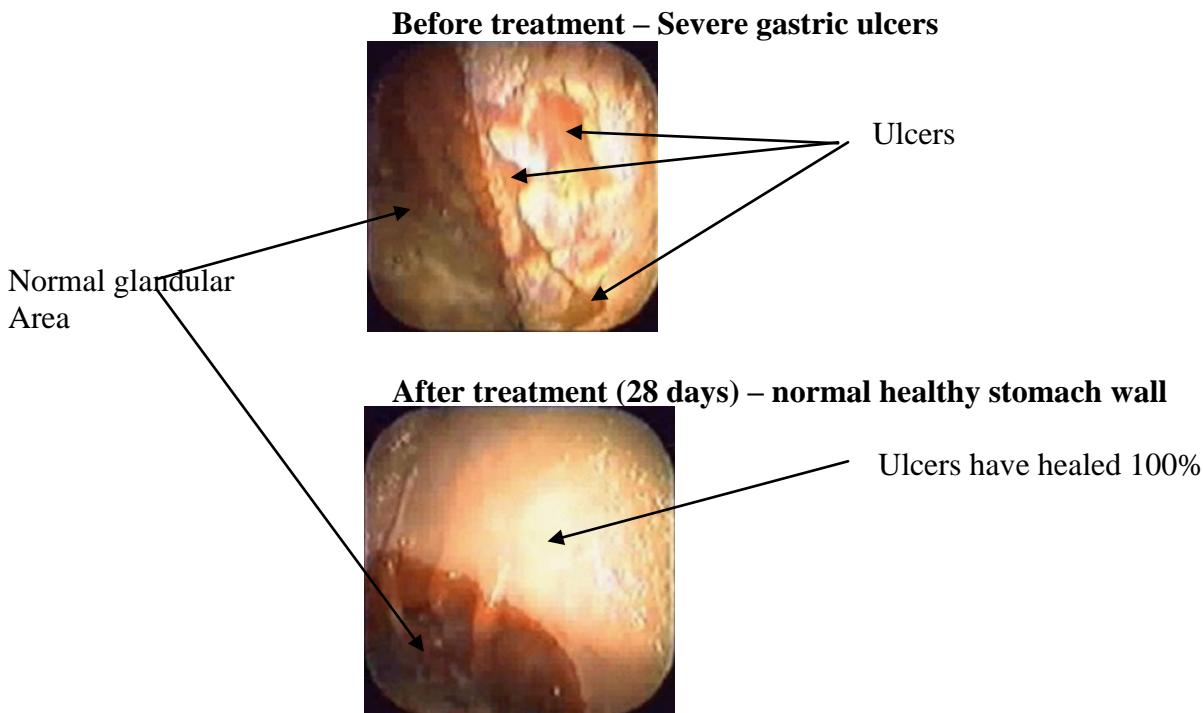
Gastric ulceration in the horse is a serious and debilitating disease which negatively affects the performance of the athletic horse. It should be treated and prevented with medication that has been scientifically proven and registered for use in South Africa.

Omeprazole paste is a scheduled medicine only available on prescription from your veterinarian.



Equine stomach as seen through gastroscope

Treatment with omeprazole paste



If you are keen to have your horse examined for gastric ulcers and undergo a gastroscopic examination, please contact Dr. Emma Alsop at the practice on 0837817791 or 0215523450 to arrange an appointment. The practice is aiming to run ‘Gastroscope days’ where we get lots of horses into the hospital on one day, to try to bring the cost to the client, for a gastroscopic exam, down. On these days a gastroscopic examination will cost 1500R incl VAT. If you want more than one horse scoping then there is a sliding scale.

No horses	1 st scope ex vat	Incl vat	2 nd scope ex vat	Incl vat
1-2	1315	1500	1052	1200
3-5	1184	1350	947	1080
6 plus	1118	1275	894	1020

References

1. Videla, R. Andrews, F. “New perspectives in equine gastric ulcer syndrome” *Vet Clin Equine* 25 (2009) 283-301
2. Nieto, J.E. *et al.* “Effect of gastric ulceration on physiological response to exercise in horses”. *AJVR*. Vol 70, No 6, 2009. Pg 787-795