

ONE KEY TO PREVENTING ULCERS IS TO DEVELOP A FEEDING PROGRAM THAT MIMICS HOW A HORSE WAS DESIGNED TO EAT: AS GRAZERS WITH REGULAR INTAKE OF ROUGHAGE.

BELOW: A HORSE SHOWING SIGNS OF PAINFUL ULCERS.

BOTTOM: PALM BEACH EQUINE CLINIC VETERINARIANS UTILIZING A GASTROSCOPE FOR A DEFINITIVE ULCER DIAGNOSIS.



Ulcer Prevention for the Competitive Sport Horse With the Veterinarians of Palm Beach Equine Clinic

From show to show, week to week, horses are asked to perform their very best whether at a local schooling show or some of the most prestigious competitions in the world. Despite the best care and most conscientious caretakers, the travel and stress that goes along with the life of a competitive sport horse can often lead to one nasty six-letter word. Ulcers!

Dreaded ulcers can affect any horse, but competitive sport horses with the extra stressors created by a life of work and travel are especially prone to developing the common condition. According to the American Association of Equine Practitioners (AAEP), up to 90 percent of racehorses and 60 percent of show horses, as well as non-performance horses and even foals, are affected by equine ulcers.

While prevention and treatment isn't always an exact science, the veterinarians at Palm Beach Equine Clinic based in Wellington, FL, have made it a number-one priority of the practice to ensure that horses under their care remain ulcer-free.

The 4-1-1 on equine ulcers from the veterinarians of Palm Beach Equine Clinic:

What are ulcers?

Let's start at the beginning; the key to properly preventing and/or diagnosing ulcers is to have a thorough understanding of what they actually are and how they affect horses. There are two different kinds of ulcers – gastric ulcers and hindgut (colonic) ulcers, based on their location in the digestive tract. Horses can develop one or the other, or both in combination. Gastric ulcers are most common, but they are not a result of bacteria as they are in humans. Gastric ulcers develop in the stomach, which is comprised of two different halves. The lower half of the stomach secretes acid and digestive enzymes to properly digest food. If that acid splashes up to the upper half of the stomach, where there is minimal protection, it can cause painful erosion of the stomach lining.

Increased acidity in the stomach heightens the chance that acid will come in contact with the larger, unprotected portion, resulting in damage to the stomach lining. This damage is what results in... you guessed it, ulcers. There are many different factors that can change the environment of the stomach and cause increased acid production, but the most common factors are drastic changes in feeding times or types of feed, absence of feed for periods of time, undue stress, and corrosive medications.

For the competitive sport horse, the stress of traveling and showing, as well as any change in environment or increased work, can increase the chances of ulcers forming. Abnormal sleep patterns and joint or other physical pain can also cause added stress. Additionally, competition horses sometimes go without grazing or feeding for extended periods of time, resulting in an empty stomach. When acid encounters a stomach in that state, the risk of ulcers occurring is significantly increased.

Another major cause of ulcers is chronic administration of phenylbutazone (bute), banamine, or other nonsteroidal anti-inflammatory drugs (NSAIDs), as these medications can be corrosive to the stomach lining.

What can you do day-to-day to prevent ulcers?

Try to maintain a routine even while on the road! Develop a feeding program that mimics how a horse was designed to eat: as grazers with regular intake of roughage. Feed little and often. It is important to ensure that a horse has ample bedding and space to feel comfortable enough to lay down to rest. Joint supplements, routine injections, and alternative therapies such as chiropractic adjustments and acupuncture can be used to keep the horse comfortable and stress-free. Finally, work closely with your veterinarian to be conservative with the administration of medications.

How are ulcers diagnosed?

Ulcers can be difficult to diagnose as early signs can easily be confused with colic. Many times, horses with ulcers show mild, chronic, colic-like symptoms that resolve fairly quickly. Owners and trainers may notice that the horse seems sore after eating, denies feed entirely, or has colic-like symptoms such as upper lip movement, biting at its side, or pawing. If the ulcer is undiagnosed and the horse is given banamine to treat the colic symptoms, ulcers can actually be exacerbated.

There are several ways to diagnose ulcers. First, if ulcers get severe enough, they can cause the stomach to bleed, and can be tested for in a quick blood test to check for a low red blood cell count or anemia.

A small amount of dark blood present in the stool can indicate bleeding gastric ulcers or the right dorsal colon, but usually it is a microscopic amount and it can be difficult to visualize. A fecal test to test for blood in the stool can be performed, but it is not the most specific or reliable method.


The most definitive way to diagnose gastric ulcers is the use of a gastroscope to provide an internal scan. A small camera is inserted down the esophagus and into the stomach, which allows for a clear picture of the separation between the glandular bottom portion and the upper, unprotected portion of the stomach. On the gastroscope, ulcers with a range of severity can appear to be a minor red irritation or actual holes, which are depressions of the lining of the stomach. With the gastroscope, a veterinarian can also visualize the beginning of the small intestine, which is another common area for erosions to occur.

Hind gut ulcers can easily be identified by a non-invasive ultrasound of the colon. With an ultrasound, the veterinarian is able to determine if a specific area of the colon wall is thickened. Thickening of the wall is abnormal and is a primary sign of colonic ulcers.

Treatment and Prevention Tips

Once diagnosed, ulcers are graded on a scale of 1-4 based on location and severity. Grade 1 ulcers are the most mild and consist of areas of reddening or hyperkeratosis of the mucosa. Grade 4 ulcers are the most severe and consist of extensive or actively bleeding ulcers. Once graded, a treatment plan is devised.

- 1.** The gold standard treatment is Omeprazole for four weeks – one tube a day for 28 days. The most common Omeprazole treatment is GastroGard. Oral supplements, such as calcium, which help to neutralize the stomach acids and act as a buffer to protect the stomach lining, are also sometimes recommended.
- 2.** If a horse is diagnosed with ulcers, it is important to avoid bute and banamine, if possible. Also, maintaining a consistent feeding schedule is important to avoid causing any major increases in acid production in the stomach.
- 3.** Keep the pH of the stomach neutral by adding one flake of alfalfa to the horse's hay per day. It helps to lower the acidity of the stomach. Changes to a horse's diet should always be discussed with a veterinarian.
- 4.** There are many competition-safe supplements on the market such as Ulceraser that support healthy digestive function.
- 5.** A proven way to prevent ulcers is to prophylactically give Omeprazole a day or two before a stressor. If you know the horse is traveling or going to a show, start administering Omeprazole three to four days prior. Gastric medications can be given every day during the stressor time period, at the show, and then a day or two following the show. ■ **BY LINDSAY BROCK/JUMP MEDIA; PHOTOS COURTESY OF PALM BEACH EQUINE CLINIC & AND JUMP MEDIA LLC**



ULCERS CAN AFFECT ANY HORSE, BUT COMPETITIVE SPORT HORSES WITH THE EXTRA STRESSORS CREATED BY A LIFE OF WORK AND TRAVEL ARE ESPECIALLY PRONE TO DEVELOPING THE COMMON CONDITION.

Have further questions about equine ulcers and how Palm Beach Equine Clinic can help prevent them in your horse? Contact a Palm Beach Equine Clinic veterinarian today at 561-793-1599 to learn more.