Ulcers in Horses

Symptoms, causes and treatments.

Ulcers are now considered a fairly common problem among horses. Fortunately, there are plenty of things that you can do to manage them.

First, let’s discuss symptoms of ulcers:

- Recurrent colic
- Behavioral issues
- Girthiness
- Runny feces
- Recurrent colic
- Behavioral issues
- Girthiness
- Runny feces

Horses get ulcers for a variety of reasons, but stress is a leading cause. (Yes, we said “stress.”)

Whether we like to believe it or not, horses likely experience stress more often than we realize. Here are common scenarios associated with potentially ulcer-causing stress:

- Trailering
- Showing
- Intense Training
- Stable confinement
- “Boot Camp” training sessions

- Losing a pasture pal
- Horses with Cushing’s disease
- Moving to a new home
- Changes in barn mates
- Unpredictable feeding times
- Having to live without companionship
- Visits from the veterinarian and/or farrier
- Anything that makes them spook
- Any deviation from “routine.”
- Medicine, too, can be a problem.

When a horse is given non-steroidal anti-inflammatory medications (NSAIDs such as bute or banamine) for a prolonged period of time, ulcers may occur. NSAIDs, as one of their mechanisms of action, cause the blood vessels that feed the stomach wall to constrict. When the blood vessels constrict, less oxygen and nutrients to the stomach wall are available to regenerate the stomach lining.

Estimates of ulcer prevalence are 25 to 50% in foals and 60 to 90% in adult horses depending on age and performance level! Broodmares, racehorses, and horses in intense competitive training show the highest ulcer prevalence among adults. Basically, if you walk a horse up to a veterinarian and ask if it has ulcers, the veterinarian would be betting with the house if he or she responds, “Yes.”

One important thing to remember about gastric ulcers is that they are not all created equal. Ulcers are scored on a scale of 0 to 4, with 0 representing a basically normal-looking stomach wall and 4 representing severe ulceration that creates deep abrasions in the stomach wall.

Unfortunately, confirming the diagnosis of gastric ulcers can be just as much a pain in the gut as the ulcers themselves. No matter which way you go, diagnosis can be expensive and sometimes time consuming.

The gold standard for gastric ulcer diagnosis is gastroscopy. This procedure must be completed by a veterinarian and, in order for it to be done properly, the horse must be held off of feed for 12 to 24 hours prior. During scoping, the horse is sedated and a nine-foot long tube with a camera on the end of it is inserted into the stomach through the nasal passage. This procedure usually costs between $300 and $500.

Although not as thorough as scoping, many horse owners have “backed into” the diagnosis of gastric ulcers by prophylactically administering medication to their horse and then looking for a response.
While this sounds like a strange way of making a diagnosis, it’s really quite amazing how horses can “tell” owners that they are on the right track with treatment. Usually, the behaviors that caused the owner and the veterinarian to raise an eyebrow about gastric ulcers in the first place will lessen or disappear when the treatment starts to work.

If a horse owner decides to opt for experimental use of anti-ulcer medication, the next step is determining which treatment to use. There are several options, and it is wise to ask your veterinarian which medication, or combination of medications, he or she thinks would be right for your horse. Not to worry though, they won’t hurt your horse if you use them and your horse doesn’t have ulcers.

By far and away, the gold standard for treating gastric ulcers is Gastrogard (Merial). Gastrogard is omeprazole in a paste form, which is administered once daily. It acts to shut off the proton pumps in the stomach that create stomach acid. Study after study has shown that one tube of Gastrogard per day for 28 days will reduce ulcer scores. The downside? One tube of Gastrogard will set you back $33 to $50. Many veterinarians recommend trying the medication for 10 to 14 days.

### Pharmaceutical Ulcer Treatments (use at the direction of your veterinarian)

<table>
<thead>
<tr>
<th>Name</th>
<th>Amount</th>
<th>Times Per Day</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>*Gastrogard Paste (prescription)</td>
<td>½ to 1 tube</td>
<td>Once daily</td>
<td>$33 to $50</td>
</tr>
<tr>
<td>*UlcerGard (over-the-counter Gastrogard)</td>
<td>1/4 to 1/2 tube</td>
<td>Once daily</td>
<td>$9.75/dose ($39/tube)</td>
</tr>
<tr>
<td>Ranitidine tablets</td>
<td>17 to 33 tablets</td>
<td>3 to 6 times per 24 hours</td>
<td>$25/500 tablets</td>
</tr>
<tr>
<td>Tums</td>
<td>10 to 15 tablets</td>
<td>3 to 6 times daily</td>
<td>$7/160 tablets</td>
</tr>
<tr>
<td>Mylanta tabs</td>
<td>10 to 15 tablets</td>
<td>3 to 4 times daily</td>
<td>$9/24 tablets</td>
</tr>
<tr>
<td>Mylanta liquid</td>
<td>10 to 15 tablespoons</td>
<td>3 to 4 times daily</td>
<td>$9/12 oz.</td>
</tr>
</tbody>
</table>

*UlcerGard and Gastrogard, both from Merial, contain the same active ingredient, omeprazole, in the same strength. The only difference is the label instructions. Gastrogard is approved for the treatment of ulcers, which means a veterinarian has examined the horse, made a diagnosis and prescribed the treatment. UlcerGard is recommended for prevention. Both are the only FDA-approved equine ulcer treatments available.

### Non-Pharmaceutical Ulcer Treatments

<table>
<thead>
<tr>
<th>Name</th>
<th>Amount</th>
<th>Times Per Day</th>
<th>Cost</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aloe Vera Juice Generic juice for humans</td>
<td>1 cup</td>
<td>Once daily</td>
<td>$8/gallon or 50¢ per day</td>
<td>Fairly well studied for ulcer therapy. Liquid.</td>
</tr>
<tr>
<td>Chewable papaya pills Generic tablet for humans</td>
<td>8 to 12 tablets</td>
<td>Twice daily</td>
<td>$15/360 tablets or about 50¢ per day</td>
<td>Anecdotal evidence is strong. Tablets.</td>
</tr>
<tr>
<td>Egusin SLH <a href="http://www.egusin.com">www.egusin.com</a>, 800-236-6180</td>
<td>1 scoop</td>
<td>2 times per day for 21 days</td>
<td>$149 for a 21-day supply or $7.09 per day</td>
<td>Includes antacids, lecithin, pectin, and fiber. Pellets.</td>
</tr>
<tr>
<td>Natural Plan Stomach Soother <a href="http://www.stomachsoother.com">www.stomachsoother.com</a>, 847-579-1051</td>
<td>2 ounces</td>
<td>Twice daily</td>
<td>$26/64 oz. or 81¢ per day</td>
<td>Papaya puree. Palatable. Liquid.</td>
</tr>
<tr>
<td>Neigh-Lox <a href="http://www.kppusa.com">www.kppusa.com</a>, 800-772-1998</td>
<td>2 to 4 ounces</td>
<td>Twice daily</td>
<td>$35/4 lbs. or $5 per day</td>
<td>Coating aluminum proprietary formula. Powder.</td>
</tr>
<tr>
<td>Nu-Pro Ulcer-Plex <a href="http://www.multivetusa.com">www.multivetusa.com</a>, 800-356-8776</td>
<td>1 to 2 ounces</td>
<td>Twice daily</td>
<td>$69/1 gallon or $1.08 to $2.16 per day</td>
<td>Magnesium, aloe vera and other ingredients. Powder.</td>
</tr>
<tr>
<td>Platinum Gastric Support <a href="http://www.platinumperformance.com">www.platinumperformance.com</a>, 800-553-2400</td>
<td>15 to 30 grams</td>
<td>Twice daily for 2 to 4 weeks</td>
<td>$88/30 servings or $5.86 per day</td>
<td>Lactobacillus delbrueckii, probiotics, whey. Powder.</td>
</tr>
<tr>
<td>Pro CMC <a href="http://www.absorbine.com">www.absorbine.com</a>, 800-628-9653</td>
<td>1 ounce</td>
<td>Once daily</td>
<td>$45/64 oz. or 70¢ per day</td>
<td>Pink formula with calcium and magnesium. Liquid.</td>
</tr>
<tr>
<td>Smart Gut Pellets <a href="http://www.smartpakequine.com">www.smartpakequine.com</a>, 888-773-2716</td>
<td>60 grams (about 2 ounces)</td>
<td>Once daily</td>
<td>$39.95/3.75 lbs. or $1.43 per day</td>
<td>Calcium, magnesium, probiotics. Pleasant aroma. Palatable. Liquid.</td>
</tr>
<tr>
<td>Soybean Oil Generic for humans</td>
<td>1 cup</td>
<td>Once daily</td>
<td>$11/gallon or 68¢ per day</td>
<td>Improves digestive health. Liquid.</td>
</tr>
<tr>
<td>U-Gard Pellets <a href="http://www.cortaflex.com">www.cortaflex.com</a>, 866-378-8383</td>
<td>1 ounce</td>
<td>Twice daily</td>
<td>$44.95/32-day supply or $1.41 per day</td>
<td>Calcium, magnesium, pectin. Palatable. Pellets.</td>
</tr>
</tbody>
</table>
days because the majority of horses will show some response by then. Other veterinarians try to use \( \frac{1}{2} \) of a tube per day while some will combine Gastrogard with other medications. This article isn’t intended to tell you how to treat your horse for gastric ulcers. That’s up to you and your veterinarian. Frankly, each case is different so no one single approach will work on every horse.

However, our charts may help you decide if certain medications can work better for them than others based on cost, the number of times per day they must be given and how much should be administered. The first chart is pharmaceutical medications to be used per your veterinarian, and the second table shows several over-the-counter options we like.

**PREVENTION STRATEGY**
Here are some popular management strategies to minimize the formation of gastric ulcers in horses:

- Feed small, frequent meals to help keep stomach acid concentration low.
- Add beet pulp and alfalfa to the diet because they are high in protein and pectin. Both have been shown to buffer stomach acid.
- Increase hay portion of diet since bulk feeds can neutralize stomach acids.
- Decrease concentrates such as grain because grain is acidic and less bulky foods enable stomach acid to concentrate.
- House your horse with pals or at least make sure that he can see other horses. This will decrease psychological stress.
- Turn your horse out as much as possible since horses in confined housing is a prevalent findings in ulcer horses.
- When trailering or showing, consider use of an ulcer preventative since these activities are strongly linked to ulcers.
- If NSAIDS must be used, do so with gastroprotectants and use as little as possible. Consider using firocoxib, a NSAID developed to minimize alterations in gastric blood flow.

**BOTTOM LINE.**
Although the task of managing gastric ulcers in your horse can be daunting, the benefits are priceless. If you have even the slightest suspicion that your horse may be affected by gastric ulcers, consult your veterinarian ASAP.

*Article by Contributing Veterinary Editor Grant Miller, DVM.*