



STOMACH ISSUES by Dr. Alison Roth

Gastric health can sabotage your horse's performance

Have you ever prepared for a big show to get there and find that your horse is just not the same as when you left home, or worse feels colicky? This occurs more often than people imagine. Current research shows that 60-90 percent of performance horses have some degree of gastric or colonic ulceration.

Why does my horse only become irritated at shows and is fine at home?

Alterations to a horse's program dramatically increase the risk of developing ulcers. Shows, increased training/exercise, travel, and decreased turn out time all lead to an increase in stress which increases the production of hydrochloric (stomach) acid. The intensive work load decreases blood supply to the stomach to accommodate the demanding needs of musculoskeletal system. One of the most underestimated risk factors is reduced roughage (hay) intake during travel and showing. Decreased and inconsistent roughage consumption greatly decreases the amount of saliva (normally 10 gallons a day) produced which normally buffers the acid in the stomach. In clinical research ulcers can transpire in 96 hours with intermittent hay deprivation. In addition, NSAIDs (mainly phenylbutazone) which have increased usage during shows can cause colonic ulcers.

What will my horse do differently?

Presenting complaints at shows are varied depending on the severity and duration of the symptoms. Mild and early clinical signs are lethargy, irritable during saddling, not rounding, not using their self behind and even becoming pen sour. Behavioral changes you may notice in their stall can be a change in water consumption and decreased grain intake while hay intake remains normal. If this goes on for a period of time they may develop a dull and coarse hair coat and lose weight. When the symptoms become more severe horses become anorexic, paw periodically, bite at their shoulders or sides (sometimes only while being ridden), and colic. The two most common types of colic associated with ulceration are gas colic and impaction colic from alterations in bacteria within the gut and changes in transit time and water content of the digesta.

How do I know if my horse is affected?

We can use clinical signs, symptoms and response to treatment as a good suggestive diagnostic tool but the only way definitively diagnose gastric ulcers is with an endoscopic exam of the stomach. Scoping will allow a veterinarian to grade ulcers on a scale from 0-3 with Grade 0 being healthy, non-ulcerated stomach lining and Grade 3 having extensive lesions with deep ulceration and bleeding. Even still, an endoscope exam can not detect colonic ulcers and we turn to laboratory testing to aid in diagnosing them. Such tests include a fecal occult blood test (Succeed

Equine Fecal Blood Test) and complete blood cell count revealing anemia (low red blood cell count) which are both indicative of an actively bleeding ulcer within the gastric system.

What can I do to treat my horse?

Treatment is aimed at greatly reducing the acidity of the stomach for a period of 28 days to allow ulcers to heal. The most common treatment method is with a proton pump inhibitor, like omeprazole (GastroGard) that binds to and shuts off the production of acid. Additionally a hind gut buffer (Equishure) is added to the treatment to protect the colon from changes in the digesta while the acidity of the stomach is decreased. If the clinical signs are severe or immediate comfort is desired an H2 receptor antagonist (ranitidine) can be administered intravenously and works by shutting off histamine receptors which further suppress proton pump function. Another drug that is useful when horses present acutely painful is Sucralfate which binds to any ulcerated duodenal (the part of the small intestine attached to the stomach) mu-

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cosa. This acts as a band-aid like bond over the area for a few hours of pain relief.

When should preventatives be used?

After treatment has been administered it is imperative horses be placed on a preventative program during times of stress, travel or show. Omeprazole (UlcerGard) can also be used as a daily preventative just at a considerably lower dose than the treatment dose. Horses that become anxious or nervous before a class can be given ranitidine on the way to the pen to settle their stomachs for the next 4-6 hours. Several feed additives are available; many are antacids (NeighLox, U Gard, GUT, or SmartGut) that can be added to grain with every feeding that are protective for 1-2 hours.

Dr. Roth grew up in North Carolina working with Quarter Horses. She earned a bachelor's degree from North Carolina State University and DVM from Oklahoma State University. Dr. Roth is finishing up an internship with Hasinger Equine Service and will stay on as an associate veterinarian. Questions, comments or suggestions can be e-mailed to Alison.roth@okstate.edu or writing to InStride Edition.