

What Exactly *IS* Colic, Anyway?

By Dr. Melissa A. Holcomb, DVM, MPH; Abraham's Equine Clinic

Colic in the horse is a generic term for abdominal discomfort. There are many different types of colic that range from mild causes to potentially life-threatening. The two most common types of colic are gas or spasmodic colic and impactions.

Gas/spasmodic colic can be due to moldy hay, switching to a new feed suddenly, changing feeding schedule, weather changes, excessive intake of cold water after exercise and others. Impaction colic is usually due to a lack of water intake causing 'constipation' with dry, hard fecal matter in the colon. Other types of colic include sand colic, parasitic impactions, intestinal displacement, intestinal volvulus/torsion (twisting), nephrosplenic entrapment (a piece of intestines is trapped over the ligament between the kidney and spleen), strangulating lipoma (a fatty tumor common in older horses that wraps around a piece of intestine), enterolith (a concretion of minerals that can form in the intestines and can cause an obstruction), ileus (no motility), enteritis/colitis, intussusceptions (one section of the intestine telescopes inside another part and becomes entrapped) and others.

Intestinal pain usually arises from either excessive distension (with gas, fluid or fecal material) or twisting. Signs that your horse may have colic include pawing, rolling, looking at his belly, restlessness, laying down more than usual, kicking at his belly, going "off feed", acting dumpy, sweating, not passing feces normally, etc. An increased heart rate and respiratory rate can indicate that your horse is in pain. An abnormal body temperature can also be an indication that he is ill. To learn how to take your horse's vital signs, refer to the video "How to Take Your Horse's TPR" on youtube.com (<http://www.youtube.com/watch?v=CjL3ISwLzAK>). Being able to assess your horse's vital signs can provide valuable information to you and your veterinarian.

If you think that your horse may have colic and is only mildly uncomfortable, remove his feed and begin hand-walking him, which can help improve his gut motility and make him more comfortable. If he doesn't improve within 30 minutes or if he seems more than just mildly uncomfortable, you need to contact your veterinarian. Wait to give medications until you have consulted with your veterinarian.

When your veterinarian examines your horse, he will begin by taking your horse's vital signs (heart rate, respiratory rate and



temperature). He will also evaluate his pain level, the color and capillary refill time of the mucous membranes on his gums, hydration status and gastrointestinal motility. Your veterinarian will also perform a transrectal palpation to determine if any of his internal organs feel out of place, gas distended or impacted. This part of the physical exam is key to determining what type of colic your horse has. Your veterinarian will also 'reflux' your horse to evaluate the character and quantity of fluid/feed in your horse's stomach and to assess whether or not there is an intestinal obstruction or twist that is causing fluid to back up into the stomach. While the nasogastric tube is in your horse's stomach, your veterinarian can administer oral fluids, electrolytes, mineral oil (a laxative), psyllium (to bind sand), etc if deemed appropriate for the suspected type of colic.

Additional diagnostics that can be performed include a 'belly tap' to assess the fluid that surrounds your horse's intestines; an abdominal ultrasound to look at intestinal movement, wall thickness, dilation, abdominal fluid, etc; and bloodwork.

After assessing your horse, your veterinarian may administer several medications to ease your horse's discomfort and make him more comfortable, such as

pain-relievers (Banamine), smooth muscle relaxers (Buscopan) or sedation. If your horse is dehydrated or impacted, he may need oral or intravenous fluids to help him rehydrate.

While most colics can be managed with medical treatment, a few require surgery to correct the abnormality. Your veterinarian will make this determination following his exam and your horse's response to medical treatment. There are a small percentage of colics that do not respond to medical therapy and cannot be corrected surgically (and may not economically be an option for the horse owner) and ultimately require euthanasia. Therefore, colic should never be taken lightly and prompt assessment and treatment are crucial to ensuring a positive outcome for your horse.

Here are a few practical tips that may help reduce the likelihood of colic for your horse:

- Always provide access to fresh, unfrozen water
- Make sure your horse is drinking enough water, especially in bad weather (adding a little apple juice or electrolyte powder to his water may encourage him to drink more)
- Make any feeding changes gradually over several days
- Stick to a routine feeding schedule
- Do not feed excessive amounts of grain
- Do not feed moldy hay or grain
- Control internal parasites through a deworming regimen
- Have his teeth examined and/or floated regularly
- Provide adequate shelter from the elements
- Ensure adequate turnout/exercise

In general, good management can help you to avoid situations which may predispose your horse to colic. However, colic can still occur even with the best prevention efforts. If colic symptoms do arise, your veterinarian is only a phone call away.

Melissa A. Holcomb, DVM, got her Doctor of Veterinary Medicine degree at the University of Minnesota College of Veterinary Medicine in St. Paul, MN.

Dr. Holcomb got her Masters in Public Health from the University of Minnesota School of Public Health in Minneapolis, MN.

And Melissa got her BS in Biology at Bemidji State University in Bemidji, MN.