

MANAGING RISK OF COLIC

As the fall and winter months come upon us, it is appropriate to address the topic of colic. Colic is a general term that describes abdominal (or gut) pain in the horse. There are as many causes of colic as there are manifestations of the problem. In this article, we hope to identify the signs and causes of colic to minimize the chance of colic in your animal(s).

The horse demonstrates colic pain in fairly predictable ways. The early signs of colic include not eating, laying down and not wanting to get up, stretching out to urinate and not passing urine, pawing with the front feet, and kicking up at the belly with the hind feet. As the pain progresses, the horse will often try to lay down and roll, will become sweaty, and will not get up once it is lying down. From these outward signs, the owner can tell that the horse has abdominal pain, but the cause of the pain cannot be determined without a veterinary examination.

In evaluating a colicky horse, the veterinarian will check the animal's body temperature, the heart rate, the respiratory rate, the quality and quantity of intestinal sounds, the color of the gum and estimate the degree of dehydration. He or she will palpate the intestines and other abdominal organs by performing a rectal examination. Finally, she or he will pass a tube from the horse's nose into the stomach to check for excess fluid in the stomach. By putting all the physical examination findings together, the veterinarian will be able to give the horse owner a likely diagnosis of the type of colic.

Colic can be broken down into several broad categories that describe the particular intestinal problem. Examples include:

- Simple obstruction – where there is a blockage in the intestine. These include feed impactions, sand impactions, blockage by intestinal stones, roundworm impactions in foals, and meconium impactions in foals, etc.
- Strangulating obstructions – where the blood supply has been cut off from a portion of the intestine because of an intestinal twist, displacement, or hernia.
- Primary gas colic – no blockage or twist is present, just gas enlargement of the large intestine.
- Intestinal inflammation – where a portion of the stomach or intestine is inflamed. These include stomach ulcers, the various causes of diarrhea, and small intestinal enteritis.
- Other – these include problems that do not fit in the categories above including intestinal tumor, intestinal damage due to worm migration (infarcts), liver disease, pancreatitis, abdominal abscesses, etc.

The particular type of colic dictates how extensively the horse needs to be treated. Treatment usually consists of pain medication and possibly laxatives given by a nasogastric tube. More serious types of colic may require IV fluids or surgery for correction.

Of more concern to many horse owners is the cause of colic and what can be done to prevent it. For most types of colic, we cannot definitively find a cause. However, research and university studies have identified some predisposing factors for colic. From these studies, we have determined:

- Breeding horses are nearly twice as likely to colic than non-breeding pleasure horses.
- Arabian horses are more than twice as likely to colic as compared to some other breeds (thoroughbreds).
- The risk of colic is significantly increased if a horse is primarily cared for by a trainer or farm manager instead of the owner.

- Colic risk is significantly less for horses that have access to pasture.
- Horses that have access to an outside enclosure without access to water have a significantly higher risk of colic (10 times higher in horses over six years old). This includes horses that are turned out for just a couple of hours. In addition to having access to water, it is important that we know whether the horse is drinking the available water.
- Colic risk increases significantly with whole grain corn consumption. Overfeeding of any grain concentrate also increases the risk. The recommendation is to not feed more than five pounds of grain in any single meal.
- Colic risk is four times higher in horses that have had a previous history of colic.
- The use of a daily dewormer significantly decreased the risk of colic in the small number of horses reported using it.
- Horses that have a rapid feed change are significantly more at risk for colic. Empirical evidence shows that any feed changes should be made over a four to five day period.
- Ingestion of poor quality hay predisposes a horse to impactions. Likewise, having a horse only eat lush spring pasture can also lead to colic.
- Ingestion of large quantities of apples can lead to colic. Unfortunately, researchers have not determined how many is detrimental. We know that self-feeding of apples is quite dangerous, but that one apple a day will not cause a problem.

Although we as horse owners and veterinarians cannot control all of the variables that can cause a horse to colic, many management and nutritional practices can be changed to reduce a horse's risk of developing colic.