

Ballybrown Equine Clinic

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<u>COLIC</u>

Minimizing Its Incidence and Impact in Your Horse

Colic is the number one killer of horses. The good news is that most cases of colic are mild and resolve with simple medical treatment, and sometimes with no medical treatment at all. Less than 10% of all colic cases are severe enough to require surgery or cause the death of the horse. Nevertheless, every case of colic should be taken seriously, because it can be difficult to tell the mild ones from the potentially serious ones in the early stages.

Colic is not a disease; it is merely a symptom of disease. Specifically, colic indicates a painful problem in the horse's abdomen. There are dozens of different conditions that can cause a horse to show signs of abdominal pain. Most (but not all) involve the digestive system, most often the stomach or intestines.

RECOGNISING COLIC

Horses show signs of abdominal pain in a wide variety of ways. Some signs, such as curling the upper lip are subtle and easily overlooked, whereas other signs, such as repeated rolling or violent thrashing, are hard to mistake. Among the more common signs of colic are these:

- **1.** Turning the head towards the flank.
- **2.** Pawing the ground.
- **3.** Kicking at the belly.
- 4. Stretching out as if to urinate, without doing so.
- 5. Repeatedly lying down and getting up.
- 6. Repeated rolling.
- 7. Sitting in a dog like position or lying on the back.
- 8. Holding the head in an unusual position, e.g., with the neck stretched out and the head rotated to one side.
- 9. Leaving food or being completely disinterested in food.
- **10.** Putting the head down to water without drinking.
- 11. Lack of bowel movements or fewer bowel movements than normal.
- **12.** Reduced or absent digestive sounds.
- **13.** Inappropriate sweating (unrelated to warm weather or exercise).
- 14. Rapid breathing or flared nostrils.
- **15.** Elevated pulse rate (greater than 50 beats per minute).
- 16. Depression.

Usually, a horse shows only a few of these signs during an episode of colic. Seeing any of these signs should prompt you to take a closer look and keep a watchful eye on the horse.

In general, the more obvious the signs of pain, the more serious the problem. Also, in horses with serious conditions, the signs of pain usually persist and may even worsen with time, whereas in horses with mild colic, the signs of pain may be intermittent or may disappear in a short time.

TAKE IMMEDIATE ACTION

While some cases of colic resolve without medical care, a significant percentage of horses with colic require medical treatment. Time is perhaps the most critical factor if colic is to be successfully treated, particularly if the horse has a condition that requires major surgery.

If you suspect your horse is suffering from colic, the following action plan is suggested:

- **1.** Call your vet immediately.
- 2. Remove all food from the horse's surroundings, but leave some water.
- 3. If necessary, move the horse to a small enclosure so you can watch it more closely.
- 4. If it is dark, arrange for some lighting so that the vet can examine the horse properly.
- 5. Allow the horse to rest if it simply wants to stand or lie quietly; walk the horse around if it is continually rolling or in danger of hurting itself- but do not tire the horse with relentless walking.
- 6. Keep the horse under close observation until the signs of colic resolve or the vet arrives.

Alert your vet from the outset that your horse is suffering from colic. He or she may not need to examine the horse immediately if the colic signs are mild, but leave that decision to the vet. When you call, be prepared to provide as much of the following information as possible.

- Specific signs of colic and their severity.
- Heart rate (beats per minute).
- Respiratory rate (breaths per minute).
- Rectal temperature.
- Colour of the gums (white, pale pink, dark red).
- Moistness of the gums (moist, tacky, dry).
- Refill time for gum colour (the time it takes for the colour to return to the horse's gums after you briefly press on the gum with your thumb; normal is 1-2 seconds).
- Digestive sounds (if any).
- > Bowel movements, including colour, consistency and frequency.
- Any recent changes in management, feeding or exercise.
- Medical history, including de-worming and any past episodes of colic.
- Breeding history and pregnancy status if the patient is a mare and a recent breeding history if the patient is a stallion.
- Insurance status of the horse.

After evaluating this information, your vet will advise you on the appropriate course of action. Follow your vet's advice exactly. Do not administer any drugs to the horse unless specifically directed to do so by your vet. Sedative or pain relieving drugs can camouflage serious problems and interfere with accurate diagnosis.

THINGS TO AVOID

Unless you have the necessary training, equipment and experience, do not attempt to do any of the following:

- 1. Pass any kind of tube into the horse's stomach. It is very easy to damage the horse's nasal passages, throat, or oesophagus with improper equipment or technique. Also, the tube passes more readily into the trachea (windpipe) than into the oesophagus, potentially damaging the trachea. Any liquid poured down the tube will be delivered directly into the horse's lungs.
- 2. Give the horse any substance by mouth, particularly liquids. Most horses resist swallowing liquids given by mouth, and some of the liquid may be inhaled into the lungs. Mineral oil is particularly harmful when inhaled.
- **3.** Insert anything (your hand, a hose or any other kind of tube or device) into the horse's rectum. The rectum is easily damaged, and rectal tears can be fatal. Also, intestinal blockages generally cannot be relieved simply by removing manure from the rectum or giving the horse an enema.
- 4. Give any intravenous injections. Even with practice, every i.v. injection carries some risk.

EVALUATING THE PROBLEM

Your vet may use a variety of procedures to determine the type and severity of the colic and devise an appropriate treatment plan. Procedures include the following:

- ➢ Accurate history.
- Review of your observations and evaluation of the horse's behaviour.
- Complete physical examination (including vital signs and presence and quality of intestinal sounds).
- Rectal palpation, looking for evidence of intestinal blockage, distention, displacement or other abnormalities.
- Passage of a nasogastric tube to identify the presence of excess gas or fluid in the stomach.
- Collection of fluid from the abdominal cavity and analysis for abnormalities which might indicate compromise of the bowel wall or infection.
- Blood tests, looking for evidence of dehydration, electrolyte or metabolic abnormalities or infection.
- Evaluation of the response to treatment.

CLASSIFYING COLIC

Determining the type of colic is important in deciding how best to treat the horse. Even though there are myriad causes of colic, most cases fall into one of three groups:

1. Intestinal Dysfunction: This is the most common category and simply means that the horse's bowels are not working properly. It includes such things as spasms, gas

distention, impaction, and decreased motility. These types of problems usually respond well to medical treatment.

- 2. Intestinal Accidents: These occur less frequently, and include displacements, twists and entrapment of a section of intestine in a tight space. Some horses seem anatomically predisposed to such problems. Intestinal accidents almost always require emergency surgery.
- **3. Inflammation or Ulceration**: These problems are named according to the bowel section involved; e.g., gastritis (stomach), enteritis (small intestine) and colitis (large intestine). They can be caused by numerous factors, including stress, medications, infection and parasites. Medical treatment is generally required.

TREATMENT

Treatment of colic depends on its severity and on the likely cause. Treatment options include the following:

- Pain relievers (analgesics) or sedatives to relieve the pain while intestinal function returns to normal or further treatment is instituted.
- Fluid therapy, either by nasogastric tube or intravenous infusion, to correct dehydration and soften dry, firm intestinal contents.
- ▶ Laxatives, such as mineral oil, to help re-establish normal intestinal function.
- Enema for young foals with a blockage caused by retained meconium.
- Surgery (usually with a horse under general anesthesia).

When your horse has colic, it can be reassuring to remember that most causes of colic resolve with simple medical treatment.

NOTE: If your horse is insured, contact the insurance company immediately if surgery seems likely or if euthanasia is a possibility.

PREVENTING COLIC

Colic is a problem with many potential causes and contributing factors, some of which are beyond our control. However, management plays a key role in most cases, so colic prevention centers on management. Although not every case of colic is avoidable, the following guidelines can maximise your horse's health and reduce the risk of colic:

- Establish a set daily routine- including feeding, exercise and turnout schedules-and stick to it (even on weekends).
- Feed a high quality diet comprised primarily of roughage (pasture, hay, hay cubes, haylage). Except for young foals, all horses should be fed at least 1% of their body weight (or 1lb per 100 lb body weight) of good quality roughage per day.
- Limit the amount of grain based feeds. (Grain in any form, sweet feed, pellets in which the main ingredients are grains). Feed these only as a supplement, and not more than 50% of the diet.

- Divide the daily concentrate ration into two or more smaller feedings, rather than one large one, to avoid overloading the horse's digestive tract. Hay is best fed free choice.
- Set up regular parasite control program with the help of your vet. Use fecal examination to determine its effectiveness.
- Provide exercise and/or turnout every day.
- Make any changes to diet, housing and activity level gradually.
- Provide fresh, clean water at all times.
- > Avoid giving your horse medications unless prescribed by your vet.
- Check hay, bedding, pasture and environment for potentially toxic substances, such as noxious weeds and other ingestible foreign matter.
- > Avoid putting feed on the ground, especially in sandy soils.
- Reduce stress; horses experiencing changes in environment or workloads are at high risk for intestinal dysfunction.
- Pay special attention to animals when transporting them or changing their surroundings such as shows.
- > Observe foaling mares pre- and post- foaling for any signs of colic.
- Pay particular attention to horses that have had previous bouts of colic, as they may be at greater risk for repeated episodes.
- Maintain accurate records of management, feeding practices and health.

SUMMARY

The key to minimizing the incidence of colic is good management. The key to minimizing the impact of colic (i.e., increasing the chances of a good outcome) is to identify the problem early and call your vet immediately. Treat every incident of colic as potentially serious, and involve your vet from the outset.