



Hampden Equine

Veterinary Practice

Caring for horses

Equine Colic

An overview of colic in horses





Equine colic

Colic is a common reason for a horse owner to call a vet.

What is colic?

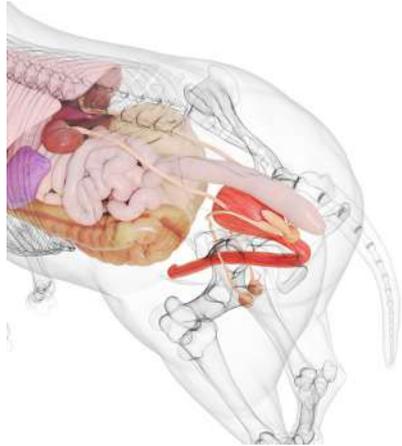
Colic is the term used to describe the clinical signs that are demonstrated by a horse in response to abdominal pain.

Mild signs of colic may be restlessness, tail swishing, flank watching or kicking at the abdomen. Horses with more severe signs of abdominal pain may show prolonged periods of recumbency or demonstrate frequent rolling.

Just as abdominal pain in humans may have many causes, the same is true in the horse. In most cases, signs are mild to moderate and will self-correct. In other cases, colic may be associated with a more serious condition that may require surgery to save the horse's life. Sadly, some cases may be fatal.

The gastrointestinal tract of a horse is approximately 25-30 metres long in total. It consists of the oesophagus, stomach, small intestine, large intestine, small colon and rectum.

Pathology or dysfunction of any part of the gastrointestinal tract may result in colic signs.



There are many different causes and types of colic. Abdominal pain may arise from:

- Distension (stretching) of the gut which may occur due to a build up of feed material (impaction) or to accumulation of gas. Gas may build up due to abnormal fermentation of food material or obstruction due to a blockage, entrapment or twisting of the gut
- Spasms and hypermotility of the gut
- Loss of blood supply to a portion of the gut (ischaemia)
- Abnormal or irritation of the mucosa (lining of the gut) due to sand, diarrhoea etc or the serosa (outer surface of the gut) in cases of peritonitis



Types of colic

Spasmodic colic - is one of the most common types of colic. Pain arises due to spasm of the intestine. There are many different factors that may trigger this, including recent a change in diet, particularly access to lush grass. However, in many cases it is not possible to determine the exact cause. Most cases respond well to medical management with pain killers and anti-spasmodic drugs.

Tympanitic (gassy) colic - can also be due to many different causes, including increased intake of fresh grass, crib-biting/windsucking. Most cases respond well to medical management.

Impaction colic - impaction of the stomach, ileum (end of small intestine) or large intestine with feed may occur due to a variety of factors including reduced exercise or box rest, reduced water intake, poor dentition, tapeworm infestation. Impactions may also occur due to accumulation of sand or bedding in the intestine.

Displacements - colic due to large intestinal displacements, occur when a section of the large intestine moves from its normal location. This causes interruption of the passage of feed material through the intestine, build up of gas and stretching of the attachments of the bowel. Many cases will self-correct and respond to medical treatment however, in some horses, surgery is necessary to correct the displacement.

Twisted gut (volvulus) - twisting of the small intestine or large intestine may cause an obstruction of the blood flow to the involved portion of bowel resulting in ischaemia (lack of blood supply) and ultimately necrosis of that portion of bowel. This can cause severe pain in the early stages and then, as the gut dies, the horse becomes progressively sicker due to the release of large numbers of toxins into the blood stream. This is a surgical emergency and early intervention is important to maximise the chances of survival.

Types of colic

Colic signs may also occur due to grass sickness, gastric ulceration and colitis or enteritis.

False colic – clinical signs that mimic colic may occur due to non-gastrointestinal diseases, such as pleuritis, liver disease, atypical myopathy and laminitis.

Trigger factors

Studies have shown that an increased risk of colic can be due to the following:

- Recent change in hard feed or hay/haylage
- Change in level of exercise
- Reduced water intake
- Changes in turnout/stabling
- Poor dentition
- Lack of parasite control
- Cribbing/windsucking
- Change in weather



All horses displaying signs of abdominal pain, should receive prompt veterinary attention as early veterinary intervention significantly improves the chances of survival in severe cases.

What to tell the vet?

- When were the colic signs first observed and how have the signs progressed
- When was the horse last seen demonstrating normal behaviour
- If your horse had any recent diet or management changes recently
- How much water and food has your horse recently had?
- Recent faecal/urine output
- Previous history of episodes of colic?
- Any other medical issues?



What to do whilst you wait for the vet?

Your vet will advise you what to do whilst you wait for them to arrive but taking precautions in the meantime can help:

- Remove all food
- Put your horse in a safe area (sand school or stable with deep bedding) - to avoid them injuring themselves, should they lie down/roll
- If your horse wants to lie down or roll, let them

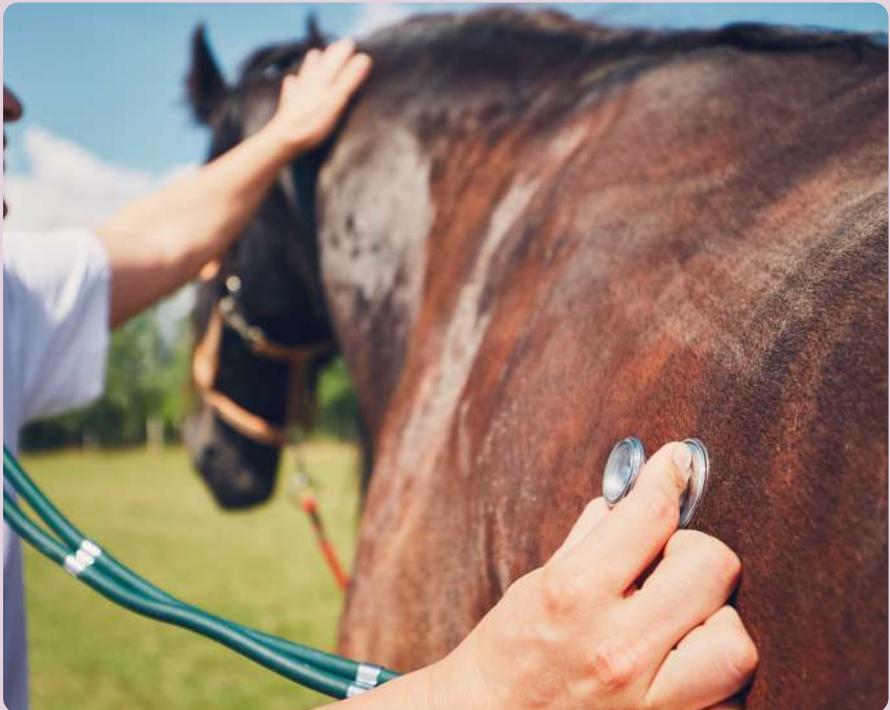


Most importantly Stay Safe! - Ensure the safety of all personnel. Remember a horse in pain can become very unpredictable.

What will the vet do?

When the vet arrives, they will likely perform a thorough examination of your horse. They will usually check the following, if it is safe to do so:

- **Heart rate** - this is a useful indicator of the severity of the systemic shock. A mild elevation in heart rate is common with pain but a greater elevation in heart rate may indicate that the horse is cardiovascularly compromised.
- **Abdominal auscultation** - generally, the quieter the gut sounds the more serious the problem
- **Rectal temperature** - if the horse's temperature is elevated this may indicate inflammation or an infection
- **Faeces** - the vet will check faeces for consistency, blood, worms, sand and mucous



What will the vet do?

The vet may also perform further tests and examinations including:

- **Rectal palpation** – examination per rectum will allow your vet to feel for displacement or distension of bowel in the back half of the abdomen
- **Passing nasogastric tube** – the passing of a tube into the stomach allows your vet to determine whether there has been a build up of fluid in the stomach if the passage of food material is blocked or the gut is not functioning correctly. Retrieval of fluid is important to alleviate pain and also to prevent stomach rupture
- **Blood work** – to assess the level of dehydration/infection/liver and kidney function and if there is any inflammation damage
- **Ultrasonography of the abdomen** – this can be a very useful imaging technique to demonstrate abnormal distension of intestine, abnormal positioning of the intestines or abnormal accumulation of fluid (eg in cases of haemoperitoneum or peritonitis)
- **Peritoneal tap** – the sterile collection of peritoneal fluid by sticking a needle into the peritoneal cavity. Observation of colour changes and changes in the cell count or protein levels in the fluid can be very useful to determine whether there is compromised intestine in the abdomen

In many cases, treatment will be administered by the attending vet. This may include pain relief, sedation and other more specific treatments.

It is important to ensure that the horse can be observed and checked for a few hours to ensure response of treatment.



Referral to a hospital

While the majority of colic cases can be treated at home with pain relief and other medication and treatments, some horses will require referral to an equine veterinary hospital for more involved medical treatment or surgery.

It is important to ensure that you have considered whether you would wish your horse to be referred on to a hospital and if so, to ensure that you have a contingency plan for transport.

At the hospital, the vets will re-assess the horse and perform further diagnostic tests as required, to try to determine the cause of the colic.

If the horse can be treated medically, they will be admitted into a stable and appropriate medical intervention given. Ongoing careful observation and monitoring of the horse to determine response to treatment and progression of the signs is very important.

In some horses, emergency abdominal surgery is necessary to correct the problem and to save the horse's life.

Surgery is usually performed in an operating theatre and requires a team of vets and nurses.

In almost all cases, surgery is performed under general anaesthetic via a ventral midline incision.

The procedure undertaken will depend on the cause of colic and may involve repositioning of displaced bowel, opening of the bowel to relieve gas distension, impacted food material or obstructions and removal of intestine with irreversible damage to its blood supply.



Referral to a hospital

Post-operatively, horse that have undergone colic surgery need round-the clock intensive care and careful monitoring . Most horses will remain in the hospital for 7-10 days after surgery but in more severe cases, a longer hospital stay will be required.

Prognosis after surgery will depend on a number of factors but particularly on the nature of the problem, site of the problem and how early or late surgical intervention was undertaken.

The cost of colic surgery and after care will depend on the nature of the colic and the amount of care needed in the post-operative period. It is not unusual for costs to escalate with typical bills between £6,000 to £10,000.

It is important to consider what you would do if your horse has colic:

- Does your yard have your contact details or your vet's details?
- Do your yard know your preferences for treatment of your horse?
- Do you have transport available at short notice, if you need to be referred to a veterinary hospital?
- Is your horse insured for colic and to what level are vet fees covered?







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