Horse Health:

Colic

What is it?

Colic is the general term used to describe abdominal pain in horses. It is not a disease itself but a symptom of various underlying gastrointestinal or abdominal issues. These can range from mild gut spasms (spasmodic colic) to life-threatening conditions like intestinal twists (volvulus). Colic is both relatively common and potentially life threatening, requiring rapid recognition and treatment.

What causes it?

Most causes of colic are due to problems in the digestive system, although occasionally other causes of abdominal pain can cause the same symptoms.

Common causes include:

- **Spasmodic colic:** This occurs when the muscles in the intestines go into spasm, causing pain. It may be associated with gas build up (“gas colic”), stress, changes in routine, or high burdens or tapeworms.
- **Impaction colic:** Impaction occurs when dry feed or foreign material blocks the gut, usually in the large colon, and most frequently at the pelvic flexure where the colon turns back on itself. This is commonly due to dehydration, poor diet, or dental disease that prevents the horse from chewing properly.
- **Intestinal volvulus (Twisted intestines** or **strangulation): T**he horse’s intestine is constantly moving, and sometimes loops of small

intestine will become twisted in such a way that the blood supply is cut off. This results in death of the bowel, and can rapidly prove fatal without surgery.

- **Displacement colic:** As a result of this movement of the intestine, sometimes it can get trapped in the wrong place (e.g. over the ligament between the spleen and the kidney, known as a nephrosplenic entrapment). These displacement colics are quite variable.
- **Sand colic:** Sand in the bowel irritates it, causing colic signs. It's usually due to horses drinking from sandy streams or water courses, and ingesting the sand in the process.
- **Equine Gastric Ulceration Syndrome (EGUS):** Stomach pain from the ulcers can also cause colic symptoms.

What horses are at risk?

All horses are susceptible to colic, but certain factors increase the risk:

- Horses with **inconsistent feeding routines**
- **Stabled horses** with limited turnout or exercise
- **Older horses**, especially those with dental issues
- Horses with a **history of colic**
- Horses fed a **low fibre diet**
- **Foals**, which may show different symptoms than adults
- **Horses on high-starch diets** or those with sudden feed changes
- Horses with **poor parasite control** or **dental care routine**

What are the symptoms?

Colic symptoms vary in severity and presentation, but common signs include:

- General discomfort
- Loss of appetite

- Few faeces, or hard dry faeces
- Diarrhoea (less commonly)
- Lying down and getting up repeatedly
- Pawing at the ground
- Looking or biting at the flank
- Rolling or attempting to roll
- Stretching out as if trying to urinate
- Kicking at the abdomen
- Sweating and restlessness
- Abnormal posture (dog-sitting or lying on back)
- Elevated heart rate and respiration
- Depression or lethargy

Each horse may show different signs, so knowing your horse's normal behaviour is key to spotting changes early.

How is it diagnosed?

Diagnosis begins with a **thorough physical examination** by your vet.

Key steps include:

- Checking **vital signs** (heart rate, respiratory rate, temperature, hydration level, degree of pain, and circulatory status e.g. mucous membrane colour).
- Listening for **gut sounds** in the four abdominal quadrants (each allowing focus on a different part of the intestine – small bowel, left large colon, right large colon, and caecum).
- **Blood tests** to assess blood chemistry, especially lactate and acute phase proteins which show inflammation and the degree of devitalised tissue.
- **Rectal examination** to assess internal structures, such as

displacement, blockage of the small intestine, impaction in the large intestine. In many cases a rectal examination will require sedation and sometimes a gut relaxant to carry out safely. There is a small risk of complications from this procedure, but it is often necessary to determine the cause of the horse's symptoms.

- **Nasogastric intubation** to determine the extent of any gastric fluid buildup.
- **Abdominal ultrasound** or **belly tap** (abdominocentesis) to sample to fluid in the abdomen to detect signs of inflammation, bowel compromise, or ruptured bowel (which is usually fatal).

The history will also be important, in particular, any previous history of colic, and reviewing the horse's **feeding, deworming, and dental history**.

The vet will try to determine whether the colic is:

- **Medical:** One which can be managed with medications, potential intravenous fluids, but will not require surgery. Spasmodic colic, impactions, and some simple displacements fit into this category.
- **Surgical:** A colic which is likely to require surgical assessment and treatment, including volvulus, more complex displacement, and any colic where there are significant complications or which is not responding normally to treatment.

Response to treatment is often a key diagnostic tool in the field. A colic that responds well to analgesia is often medical in nature, while if the horse's heart rate remains Significantly elevated despite intravenous painkillers, this is usually an indication for referral for emergency surgery.

How can it be treated or managed?

Treatment depends on the type and severity of colic.

Options include:

- **Pain relief:** Usually using non-steroidal anti-inflammatory drugs such as injectable phenylbutazone. More powerful medications like flunixin meglumine are sometimes used, but these can complicate the diagnostic process as they can mask even severe pain.
- **Antispasmodic medications:** typically involving medications such as butylscopolamine to relax the spasming gut muscles.
- **Nasogastric tubing:** To relieve fluid build-up in the stomach and small intestine, or administer fluids
- **Fluid therapy:** Either intravenously or by stomach tube to correct dehydration and support gut function, as well as rehydrating gut contents e.g. in an impaction
- **Laxatives or lubricants:** Magnesium sulphate salts and liquid paraffin may be given by stomach tube to help pass impactions; although liquid paraffin may be avoided if surgery is possible as it makes surgery more difficult.
- **Surgery:** In severe cases such as twisted intestines, strangulations, or more complex displacements, or where bowel damage is so severe that a section of intestine needs to be removed. Early referral for surgery has the best prognosis, so if a case is not responding as expected, referral will be discussed before the horse becomes critical. This may mean that an “unnecessary” referral takes place, but this is because if left, the horse may no longer be fit to travel when it becomes clear that surgery is the only option.
- **Hospitalization:** For monitoring and intensive care. The success rate of modern surgery revolves around the quality of aftercare, especially gut status monitoring, fluid support, and dietary support.

Some mild cases may resolve with walking and close observation, but

never delay veterinary attention - early treatment improves outcomes.

Can it be prevented?

While not all cases of colic are preventable, many can be avoided with good management practices:

- Feed a high-forage diet and limit grain intake.
- Avoid sudden changes in feed or routine.
- Provide clean, fresh water at all times.
- Ensure regular turnout and/or exercise.
- Ensure good parasite control.
- Keep up with dental care to ensure proper chewing.
- Avoid feeding on or drinking from sandy ground .
- Monitor for stress and minimize disruptions.
- Consider the use of digestive supplements (e.g., probiotics, prebiotics) during transitions.
- Observe your horse daily for early signs of discomfort.

And should you worry?

Yes, but not panic. Colic is serious and can be fatal if untreated, but **most cases are mild and treatable** with prompt veterinary care. As a horse owner, your best defence is **education, vigilance, and preparation**. Know your horse's normal behaviour, have your vet's number handy, and act quickly if you suspect colic.