



Colic is a term which strikes fear into many horse owners, but what is colic and what does it mean if your horse has it? **Lee Pritchard**, from Calweton Veterinary Group, Callington, Cornwall, explains.

Causes and symptoms of colic

All the term colic really describes is the behavioural signs associated with abdominal pain, of which there are a large number of causes.

Broadly speaking when first assessing a horse with colic it is necessary to differentiate between those which are associated with the gut and 'false colic', i.e. those conditions which present to us as colic but do not involve the gut (such as laminitis, ovarian disease and bladder stones). For the purposes of this article we shall be focusing on causes of colic involving the gut (gastrointestinal tract).

A horse which is colicking can do so for many reasons and so clinical signs can vary greatly. Different stages of colic can present in a number of ways and one horse will not always look the same way as another suffering from the same condition. Generally signs of colic in horses can be divided into those of mild, moderate and severe pain and can include one or all of the following.

Horses in mild pain can show pawing at the ground, flank watching, curling their lip or just

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not settling. Moderate pain can present as an animal rolling occasionally, restlessness and lying down for prolonged periods. Severe pain can present as intense pawing at the ground, sweating, violent rolling and self trauma is often noted from damage sustained.

Pain in colic is generally a result of either stretching or distension of the intestines with gas/fluid/food; unco-ordinated contraction or spasm of the intestines; loss of blood supply to a length of intestine or stretching of the mesentery (a fold of tissue which attaches organs to the body wall).

Types and causes

Defining the type of colic involved enables the most appropriate treatment and prognosis to be established. There are numerous different ways to define or classify the type of colic, but anatomical location is often the simplest.

Causes of colic associated with the small intestine include pedunculated lipoma (a fatty lump which wraps itself around a piece of intestine strangulating it), ileal impaction, herniation, grass sickness, epiploic foramen entrapment (a piece of intestine becomes trapped in a narrow opening within the abdomen) and enteritis (inflammation of the intestine).

Causes of colic associated with the large intestine include pelvic flexure impaction, displacement, tympany (over-production of gas), volvulus (360-degree rotation of the large intestine) and sand impaction.

Spasmodic colic is the most common colic encountered and is



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often mild, typically lasting a couple of hours. Loud gut sounds are often heard over large areas of the gastrointestinal tract and will respond well to gut relaxants and pain killers. Although numerous factors are linked to sparking an episode of spasmodic colic, high parasite burdens and sudden changes in diet are most frequently implicated.

Diagnosis

A thorough history and clinical examination are the most useful diagnostic tests available to us. However to build up a full picture and likely prognosis we often use a number of adjunctive tools, such as ultrasonography of the abdomen, passage of a stomach tube, removal and assessment of free fluid within the abdomen (abdominocentesis), blood sampling and in some cases exploratory surgery.

Prevention

Prevention is always better than cure and certainly some cases of colic are preventable. Regular dental examination allows identification of problems affecting chewing, thus reducing the risk of certain types of colic. Frequency of examination will be determined by a number of factors, such as age and any ongoing problems, but usually is recommended every six to 12 months and should be performed by a vet or qualified equine dental technician.

Regular monitoring and appropriate treatment of intestinal parasites will reduce the risk of colic (generally spasmodic colic, some impactions and damage caused by migration). Blanket treatment of all horses every four to six weeks is not an appropriate method of parasite control.

Worm egg counts from faecal samples provide us with information on worm burden and species of worms responsible. Tapeworms are not reliably measured from worm egg counts and so a separate blood sample is required for evaluation. When worms are the cause of colic these are poten-



Pawing the ground is one of the common signs of colic, as is rolling, flank watching and restlessness.

tially always preventable so contact your vet to discuss an appropriate worming plan for your horse.

Horses are creatures of routine and as trickle feeders it is important a regular feeding regime is maintained. Changes in both routine and diet can cause colic, with any change in diet increasing the risk for up to 14 days after. With this in mind, keep to a strict routine (this involves not only the same timings everyday but it has been shown the same person feeding everyday reduces risk) and any changes in feed must be made slowly.

Some vices predispose a horse to colic, especially those which crib bite and windsuck. Horses which have had colic in the past are more likely to have colic in the future.

It is always advisable to investigate mild episodes of colic (a worm egg count, tapeworm blood test and a dental examination are good places to start) as these can be an indication of an underlying problem and by investigating early, later suffering can often be avoided.

Treatment

When assessing a horse or pony with colic a decision needs to be made whether or not to treat medically or surgically. In some cases there is overwhelming evidence to support a diagnosis of a surgical condition, however there are numerous cases which do not always present to us as a severe colic. Therefore any horse

Summary

- Colic describes the behavioural signs associated with abdominal pain, of which there are a large number of causes
- Common signs of colic include pawing at the ground, flank watching, rolling, restlessness and sweating
- Diagnosis always involves a thorough history and clinical exam, but can also include

- ultrasonography, passage of a nasogastric tube, abdominocentesis, haematology/biochemistry and surgery
- Regular dental examination, appropriate parasite control and regular feeding regimes can help prevent certain types of colic
- Treatment usually falls into two categories, either medical or surgical dependent on cause

with colic potentially has a life threatening condition and should be seen by a veterinary surgeon.

About 90 per cent of colic cases will respond to medical therapy, including the use of gut relaxants, pain killers, lubricants and exercise. Gut relaxants are used in those horses which have evidence of gut spasm as the cause of pain and often provide good clinical results to treatment. Pain killers are an important part of colic treatment; there are a number available to us which all vary in their duration and effectiveness. Lubricants are used to relieve impactions, most commonly passed via a tube into the stomach.

Gentle exercise is used as a treatment for some conditions to relieve gas distension or to move parts of the large intestine to their proper position. Please note exercise is only used for a small number of cases and it is not advisable to exercise colicking horses unless directed to do so by your vet.

Surgical colic makes up about 10 per cent of cases and it is not often a definitive diagnosis is made until surgery is under way. The procedure performed depends on the cause of colic but surgery can involve removal of sections of dead intestine, returning sections of intestines to their normal anatomical position after displacement, relieving obstructions, relieving impactions or intestinal biopsies.

Action to take

If you suspect your horse has colic, call the vet. Colic is potentially life threatening and so any horse showing colic signs should be seen.

While you wait for the vet, if it is safe to do so, walk your horse around to prevent any secondary injuries from rolling etc.

Think of your own safety first so do not enter the stable if your horse is violently colicking. Wait for the vet to arrive if safety is a concern.