

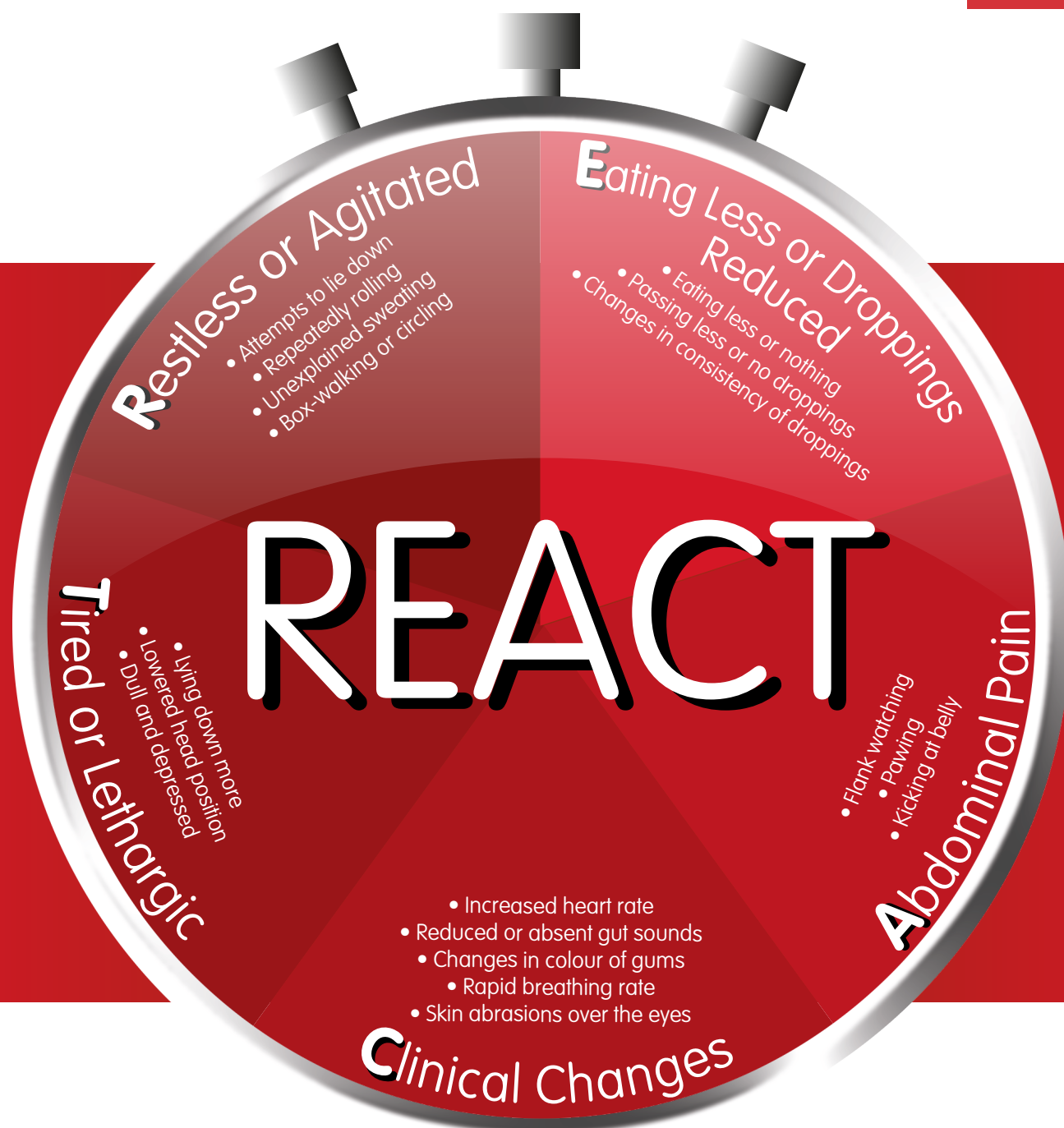
WHAT IS COLIC?



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Colic is used to describe clinical signs of abdominal pain or discomfort in the horse; hence colic is technically a symptom rather than being a disease in itself. Colic is the most common equine emergency and cause of death in horses worldwide^{1,2}.

Colic can occur in any horse of any age and breed. Studies have identified an increased risk of colic occurring with a recent change in diet or housing, a history of previous colic, increasing age and the Arab breed³. As colic is potentially life threatening it should be treated as an emergency in all instances, as any delay in diagnosis could affect the prognosis and potentially prolong pain and suffering⁴.

Please be aware this leaflet contains surgical photos

Types of colic

There are many types of colic, each with varying severity and causes. Only a veterinary surgeon should diagnose the type of colic (by the completion of specific tests) and assess its seriousness.

Spasmodic

- Spasmodic is one of the most common types of colic.
- Spasmodic describes the way the symptoms are shown spasmodically, and because it can be difficult to define, there is very little scientific evidence about what 'spasmodic' colic actually is or why it occurs.
- The horse will experience sharp bouts of pain which occur intermittently, presumed to be when a section of the gut spasms.
- Loud gut sounds may be heard.

TYMPANIC also known as flatulent or gas colic

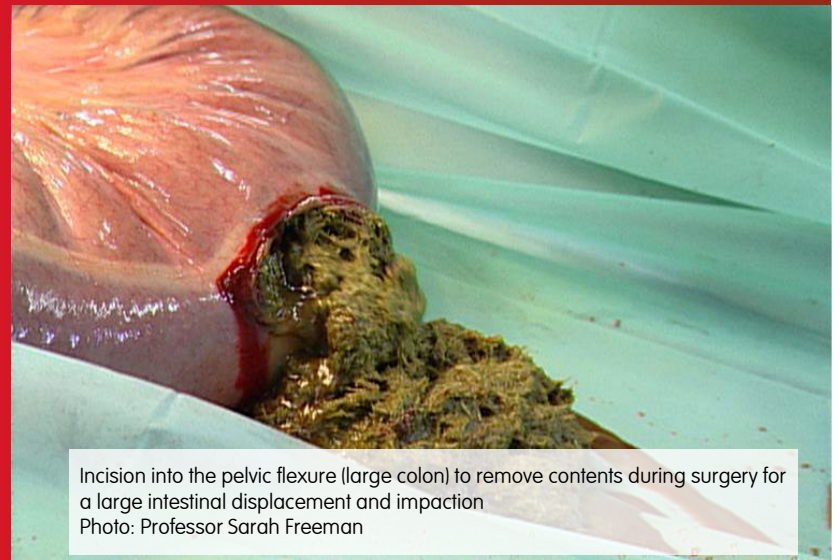
- Tympanic colic occurs when excess gas accumulates in the intestine.
- Gas expansion in the gut causes the intestines to over stretch, resulting in pain, which can range from mild to severe.
- Horses can sometimes look bloated.
- High pitch gut sounds may be heard.

Impaction

- An impaction predominantly occurs in the large intestine (which consists of the caecum, colon and rectum).
- Impactions are caused by a firm, dry ball of solid material, usually ingested food or partially formed faeces, which prevents the normal passage of gut contents.
- The most common site for impactions is a region of the large intestine called the pelvic flexure, where the intestine narrows and turns through 180° which makes it more at risk of blockages.
- Horses usually experience low grade pain for prolonged periods. Colic signs may be more subtle, such as being off their food, or passing fewer or no droppings.
- Most cases recover with appropriate treatment.
- A small number of impactions may require surgery, or can be potentially fatal if the impaction is severe or not treated promptly. Some types of impactions, such as caecal impactions, can be more difficult to treat successfully.

Sand colic

- Sand colic occurs as a result of an accumulation of ingested sand and/or dirt within the gut which may also lead to an impaction.
- The sand and/or dirt leads to irritation of the bowel lining.
- Signs vary, ranging from mild colic as described for impactions, to more marked pain or diarrhoea.
- Sand may be found in the horse's droppings.



Incision into the pelvic flexure (large colon) to remove contents during surgery for a large intestinal displacement and impaction
Photo: Professor Sarah Freeman



Enterolith (sand/concretion) removed from small colon
Photo: Redwings Horse Sanctuary

Displacements

- A displacement within the bowel happens when one section of the gut moves abnormally within the abdomen. This movement can cause an obstruction.
- There are a range of displacements that can occur within the gastrointestinal tract.
- Signs of colic can vary from mild to severe, depending on whether the displacement obstructs the intestine.
- Some displacements can be treated medically but some types of displacement and more severe displacements may require surgery.

Strangulations

A **strangulating** obstruction disrupts or completely cuts off the blood flow to part of the gut.

A **torsion** occurs when parts of the gut rotates around the place where the gut attaches to the abdominal wall and subsequently cuts off the gut's blood supply.

There are a range of different causes of strangulations and torsions. However, both types of colic can be severe and surgery will be required urgently. Horses usually show severe and continuous signs of pain, and/or signs of shock (including sweating, dullness and depression).



Colic surgery for a small intestinal strangulation by a lipoma (fatty mass).
The surgeon is holding the lipoma
Photo: Dr John Burford

Colic can also occur due to a range of other causes, including:

- Tumours
- Equine grass sickness
- Worm damage/heavy worm burdens
- Enteritis/enterocolitis – inflammation of the small and large intestine
- Infarction – blockage of a blood vessel to the gut
- Rupture or tear within the digestive tract
- Liver disease
- Pain from the other organs in the abdomen including liver, kidneys and reproductive system.



Parasite (worm) damage identified on the caecum at post mortem examination
Photo: The University of Nottingham

If you have any concerns for your horse's health
contact your veterinary surgeon immediately

References

1. Tinker, M.K., et al., Prospective study of equine colic incidence and mortality. *Equine Veterinary Journal*, 1997. 29(6): p. 448-453.
2. Ireland, J.L., et al., Factors associated with mortality of geriatric horses in the United Kingdom. *Preventive Veterinary Medicine*, 2011. 101(3): p. 204-218.
3. Blikslager, A. and T. Mair. Trends in management of horses referred for evaluation of colic: 2004-2013. in *Eleventh International Colic Research Symposium*. 2014. Dublin, Ireland.
4. Proudman, C.J., et al., Modelling long-term survival of horses following surgery for large intestinal disease. *Equine Veterinary Journal*, 2005. 37(4): p. 366-370.

For more information
please visit: bhs.org.uk/colic