Colic In Friesians Wendy Krebs, DVM, ACVS Equine Surgery Resident

Colic is one of the most common equine health problems, and remains the number one cause of equine mortality. The term "colic" is actually fairly non-specific, and only refers generically to pain originating from somewhere in the abdomen. Thus, the specific sources can vary from an intestinal impaction to a bladder stone. However, most cases of colic are due to problems with the intestinal tract. Over 90% of colics related to the intestinal tract can be resolved with medical treatment, which encompasses analgesics, sedatives, rehydration, walking, etc. The remaining percentage requires surgical intervention to correct the problem.

Surgical intervention is typically necessitated when the intestines are displaced or trapped within the abdomen in such a way that they cannot fall back into place on their own (colon torsions, right dorsal displacements, nephrosplenic entrapments, small intestinal volvulus, epiploic foramen entrapments), when foreign bodies are present (enteroliths or "intestinal stones"), or when a horse develops tumors that interfere with intestinal function (strangulating lipomas, etc.). Surgery is also required in some cases for severe impactions that are unresponsive to rehydration and laxatives.

Early identification of mild gas colics or impactions and prompt treatment can help avoid a surgical colic situation, as gas colics can progress to intestinal displacements, and impactions can become so large and firm that the only option is to manually remove the feed material via surgery.

Although there are no published references on any particular colic tendencies in the Friesian breed, there are certainly some anecdotal observations. First of all, Friesians tend to be stoic. Therefore, external signs of colic may not be evident until the process is relatively advanced. A mild impaction of the colon that would cause, for example, a sensitive Thoroughbred to paw and roll might cause a Friesian to only have a slight flank quiver or to not finish their entire dinner. This makes it important to know your horses' normal behavior well, and to observe consistently and carefully for any behavior that's out of their normal range.

If mild signs of colic or even inappetite are noted, they should be treated proactively with your veterinarian's cooperation. This will likely include administration of analgesics (Banamine), and rehydration, which may range from oral electrolyte administration to nasogastric tubing with water and electrolytes,



to IV fluid administration. Feed should also be withheld until the gastrointestinal tract is functioning normally to avoid increasing the size of a potential impaction. A temperature should be taken, as viral or bacterial infections with fevers can also cause similar signs.

More severe signs of colic such as rolling, pawing, sweating, etc. can indicate a potential need for colic surgery. Time is always of the essence when surgical intervention is required. Intestine that is strangulated of blood supply by a displacement or torsion becomes compromised quickly. Severely strangulated bowel may become non-viable within as few as 3 hours, necessitating euthanasia. Additionally, the longer the wait between onset of signs and surgical intervention, the more metabolically compromised the horse becomes, making anesthesia more risky, and the recovery period prolonged with higher risk of complication such as founder (laminitis). As heavy horses that may frequently weigh over 1200 pounds, Friesians are more predisposed to severe laminitis than light horses. Laminitis is a significant postoperative risk of colic surgery in general, especially if horses are very systemically ill, which may occur with severely compromised intestine. Compromised intestine allows the systemic absorption of bacterial byproducts called endotoxin, to which horses are very sensitive, and one of the main side effects is laminitis. As we saw recently with Barbaro, horses can recover from their primary problem, only to succumb some time later to laminitis.

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Several risk factors for colic have been identified. Risk of colic increases with horses kept primarily in stalls vs. at pasture, in horses fed high grain diets, in horses given limited or intermittent access to water. in horses on suboptimal deworming programs, in horses in which there has been a recent feed change. in horses which receive intensive exercise, in horses

which have been recently transported, and finally in horses that are fed sub-optimal feeds (fibrous hay or moldy hay). To summarize, any significant deviation from the environment in which the horse evolved, in which they grazed natural forages throughout much of the day, receiving low level exercise as they did so, seems to increase the potential for colic. The equine intestinal tract does not like change. Although we cannot always abide by these principles, since horse shows and other



Photo by Drs Ben Horsmans, www.horsmans.com

equestrian activities require transport, stalling, etc., it's best to equestrian activities requires the horse's natural environment keep them in mind and mimic the horse's natural environment to the extent possible.

