

Battling Sand Colic

OVERVIEW:

Horses eating sand is not commonly thought of as a regularly occurring event. However, being natural grazers, horses are constantly ingesting a certain amount of sand and dirt



from their environment. The amount that a horse ingests is determined by the horse's eating habits as well as the horse's feeding environment. Some horses are very discriminate about what they eat; however some are not. The amount of sand that will cause a horse to show signs of distress is dependant on the individual horse. Some studies suggest that it is common to find moderate amounts of sand in horses that show no clinical signs. Sand causes problems by way of irritating the luminal mucosa of the gastrointestinal (GI) tract. Over time, the mechanical irritation of sand causes inflammation and secondary decreased motility. Lack of normal motility causes a slowed GI transit time, which will also affect the normal GI microflora in the hind gut. This becomes a vicious circle as the amount of sand accumulates.

CLINICAL SIGNS:

A large sand burden can cause diarrhea, weight loss, colic, and may eventually lead to complete GI lumen obstruction. Many other things can cause this list of signs; therefore it is important to have your horse assessed by a veterinarian. Sand most commonly accumulates in the right dorsal colon, which has a very large diameter. Therefore, a very large amount of sand is generally required for a complete obstruction to occur.

DIAGNOSIS:

There are a few ways to check your horse for sand. One method that can be performed on the farm is a fecal sediment test. Place a sample of feces into a clear plastic glove, add water to break down the manure, and allow the glove to hang for several hours. If the horse is passing sand, the sand will settle out into the fingers of the glove. In some horses, sand can be auscultated by your veterinarian in the cranial ventral abdomen. It sounds like gentle waves rolling in on a sandy beach. These two methods do not, however, give any idea of how much sand is present or how likely the horse will colic due to its presence. Abdominal radiographs are the next step to be taken to assess the size and density of the mass of sand.



TREATMENT & PREVENTION:

The most important way to manage a horse with a tendency to ingest sand is to make environmental changes. A feeding area that raises food off the ground needs to be provided. Raised feeders, hay nets, rubber mats, and feeding tubs are all methods that can help accomplish this. Avoiding sandy paddocks and overgrazed pastures is necessary. Sometimes horses eat sand intentionally as a result of a mineral deficiency.

This can be prevented by providing a mineral supplement. Psyllium mucilloid is commonly accepted as the therapeutic and preventative treatment of sand when management changes are not enough. Psyllium is reported to work in two ways. First, it acts as a laxative. Second, when it is eaten by the horse, its fibrous texture is changed into a gelatinous material. This gel-like form swells, picks up the sand and attempts to dislodge it. Research shows that the effectiveness of this approach is variable.



There are studies that both prove and disprove the ability of psyllium to remove sand from the GI tract. Some studies have shown that combined use of psyllium, probiotics, and prebiotics enhance sand clearance. When treatment with psyllium is utilized, it is recommended to feed it once daily for seven days each month. Intermittent administration (one week per month) is recommended, because constant administration allows the normal GI microflora to adapt to the psyllium, thereby decreasing its effectiveness. When sand causes complete GI obstruction, surgery is indicated for its removal.

Please contact your veterinarian or any of the veterinarians at New England Equine Medical & Surgical Center if you have any questions about sand colic in horses.

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