

## Avoiding Sand Colic in Horses

By Kentucky Equine Research Staff · April 7, 2016

The accumulation of sand in the gastrointestinal tract of horses can cause painful obstructions. Though sand impactions can occur at various points along the tract, including the stomach, small intestine, cecum, and ascending colon, those involving the ascending colon are most often noted at surgery.

*An easy and healthy way to clear sand from the gastrointestinal tract is to provide plenty of hay.*

"Feeding on the ground and grazing short grasses can cause accidental ingestion of sand, especially in sandy areas of the world, such as southern regions of the United States," said Catherine Whitehouse, M.S., nutrition advisor at Kentucky Equine Research (KER).

Clinical signs of sand colic include general discomfort and behaviors usually associated with that, including depression, inappetence, looking at the abdomen, kicking at the belly, pawing, and curling the upper lip, as well as limited manure production.

Diagnosis of sand colic is usually made based on exposure history as well as traces of sand in the ingesta and potentially the presence of sand during rectal palpation. Because of the abrasive nature of sand, horses might have diarrhea

due to roughening and subsequent sloughing of the tract's mucosal lining. Endotoxemia might also be a factor due to bacterial translocation, or the flow of indigenous intestinal bacteria through the intestinal wall to internal tissues.

A fecal flotation test may help to determine exposure to sand, but due to a high number of false negatives, this test is not failsafe. Additionally, a fecal flotation test does not reveal the amount of sand present in the tract. Sand volume is better demonstrated by abdominal radiographs, though accumulation might be hard to detect in larger horses or in areas other than the ascending colon. Some veterinarians find benefit in using ultrasonography to identify the presence of sand, too.

Certain management tactics will keep horses from ingesting and accumulating sand in the gastrointestinal tract, according to Whitehouse.

Do not feed horses off the ground. Large, high-sided tubs should be used to prevent slinging of feed, and rubber mats should completely surround tubs so that no wayward sand is picked up as horses scrounge for morsels dropped from their mouths.

Avoid overgrazing pastures. "Horses are thought to pick up more sand when they graze close to the ground, as with the case with overgrazed

or tightly mowed fields, so this should be avoided," explained Whitehouse. Grazing areas should be rested as often as needed and allowed to re-establish growth before horses are placed back on them.

Provide psyllium. A veterinarian might recommended psyllium

powder or pellets, offered at about 0.5 lb (0.25 kg) once a day for one week every month. Daily treatment might cause gastrointestinal flora to become acclimated to this new fiber source and digest it, limiting its effectiveness.

Access to a loose or block salt. If horses are not given access to salt, they might eat soil

in an attempt to satisfy their appetite for sodium and chloride. Keep salt off the ground by using a pan or a specially designed tub with predrilled holes that allows water to drain.

Supply free-choice hay. An easy and healthy way to clear sand from the gastrointestinal tract is to provide plenty of hay. "The sheer bulk of forage is often capable of removing ingested sand. In a research trial, 2.5% of body weight per day of hay proved more effective at clearing sand than psyllium, mineral oil, or wheat bran," Whitehouse said.