

SAND

How does sand get into the horse?

Sand in the gastrointestinal tract can be harmful to your horse. Sand is accumulated when horses eat grass and hay on the ground. Horses have exceptional prehensile lips that are able to pick up very small blades of grass and items, in doing so, they may pick up small particles of sand.

How do you diagnose the problem?

The sand falls to the most gravity dependent part of their gastrointestinal tract. Which happens to be the colon. The sand may be heard with a stethoscope at the bottom front part of their belly, it sounds like waves on a beach. No other problem causes this sound. If you hear it, the horse definitely has sand, however, they may have any amount, such as one cup to 75 pounds of sand. If you do not hear sand, there may be no sand, or so much sand it is not moving and therefore cannot be heard. A sand fecal float may assist in the diagnosis of sand in the horse, If you place about a large handful of feces in a see through bag and add twice as much water then wait for about 10 to 15 minutes, the sand will fall to the bottom of the bag and a rough estimate of the quantity can be measured. The best way to conform large quantities of sand is by having x-rays (radiographs) taken of the abdomen to quantify the total amount of sand in the horse.

Sand is a lifetime accumulator, if a young horse is housed in a sandy round pen and they are fed on the ground, they may acquire more sand. Then, if this same horse is moved to a stall for the rest of their life with a new owner this horse may have lots of sand in the gastrointestinal tract even though the horse had not currently been housed in a sandy environment.

How does same affect horses?

- 1) Sand may cause *decreased* weight gain. Sand acts as a space occupier of the colon, if the colon has too much sand, then the horse cannot absorb the nutrients of the fed diet.
- 2) Sand may cause *diarrhea*. Since sand falls to the colon in the horse, it interrupts the function of the colon. The colon does a lot of the water absorption by using long villi that looks like shag carpet. Sand acts like sand paper to the long villi of the colon and makes them shorter, therefore not allowing water absorption and thus, the horse may have intermittent mild to severe diarrhea.
- 3) Sand may cause *colic*. Since sand acts as a space occupier of the colon, sometimes the horse may be more susceptible to an impaction, obstruction, or to a displacement. An impaction or obstruction can be caused by the sand simply not allowing the hay to pass through the colon. The horse becomes painful because they cannot pass feces (constipation). A displacement can occur when the heavy colon full of sand gets moved from its original position, for example when the horse does a normal roll on the ground. For both of these cases sometimes medical management with your veterinarian can resolve the colic, or in severe cases surgery may be required.

Treatment:

Psyllium is the best product to remove sand from the gastrointestinal tract. Psyllium is the same ingredient in "Metamucil" that is used for people. It is a natural fiber that forms a gel like substance around the sand particle and allows it to be lifted out of the gastrointestinal tract. Psyllium comes in many different brands in pellets, and powder formulations. It is best NOT to add water to psyllium because it turns to a gelatinous material that most horses do not enjoy taking. Most horses do not have an adverse reaction (for example colic) because it is a natural fiber, if colic is a reaction, it may be due to the change in sand volume in the colon, but very rarely to the psyllium itself.

Treatment protocols:

Maintenance: Give one cup orally once daily for 7 consecutive days. Repeat once monthly, for example: 1st-7th of every month.

Prevention:

- 1) Feeding horses on raised feeders or on stall mats which should be swept daily.
- 2) Graze horses on good quality pasture with limited sand available.
- 3) Try not to feed horses in a sandy area or paddock.



Please call with any questions! Drs. Kelly Torrisi and Anne Williams, AMC/Large/Auburn Equine 530-823-0162