



# VET NOTES

October 2010

## Previous VET NOTES

- September 2010 - Vaccines
- July 2010 - Rhodococcus in foals
- June 2010 - Wound Management
- March 2010 - Pharmacy Notes
- February 2010 - Cryptorchidism in the horse
- December 2009 - Selection of mares for embryo transfer
- October 2009 - Tying-up Syndrome
- September 2009 - Flexural deformities in the forelimbs of foals
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- June 2009 - Laparoscopic surgery: A new way to look at things
- May 2009 - Equine cardiology
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- March 2009 - Resistance to anti-parasitic drugs
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- October 2008 - Interstitial pneumonia - a different kind of lung disease
- September 2008 - The yearling sales

## Sand colic

A common cause of colic here in Florida is sand impaction of the large intestine. This is due to the high sand content in the soil that our horses graze on.

Overtime, ingested sand accumulates in the large intestine. Friction between sand particles results in slow passage through the intestinal tract when compared with normal ingesta. Also, because of its high density, sand will sediment out to lie on the floor of the intestine. Friction between the sand and intestinal lining can cause irritation and may result in mild signs of colic or diarrhea, even before an impaction develops.

Although a horse on any pasture may accumulate sand, it occurs more commonly when horses are turned out on over-grazed fields, or those with poor grass growth, where horses eat the bottom of the grass plants, including the roots, which carry sand.

When a sand impaction develops, a horse will become painful and show signs of colic. The severity of the abdominal pain varies among horses, with signs ranging from a quiet demeanor to violent rolling. When a veterinarian examines a horse for colic there are some ways in which they may be able to diagnose sand as the causing factor.

On rectal palpation, your veterinarian may feel the sand impaction, however due to the weight of the accumulated sand, the large intestine may lie on the abdomen floor, out of reach of palpation. Also gas will commonly accumulate in front of the site of the impaction and this may impede the veterinarian's ability to perform a thorough rectal palpation.

Some veterinarians will listen to the floor of the abdomen with a stethoscope as it is reported one can hear the sound of sand swirling, similar to the 'sounds of the ocean'. Unfortunately, this is not a very accurate diagnostic test and is not therefore commonly relied upon.

Feces from the horse can be put in a plastic bag or sleeve with added water. If there is a large sand content in the feces, the sand will sediment out at the bot-

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tom. This is an indicator that the horse has ingested sand, but again is not definitive in diagnosing sand as the cause of colic. Also if sand is not found in the feces, it is still possible that the horse may be suffering from a sand impaction.

Abdominal x-rays may show the presence of sand within the large intestine. Due to the large size of an adult horse, it is difficult to obtain good radiographs of the abdomen, but usually they will be helpful in making a diagnosis.

As none of the above mentioned methods are very accurate at diagnosing sand impaction, often the problem will not be discovered until the patient has been taken to surgery, or at necropsy for the horses for which surgery is not an option.

Smaller sand impactions may be successfully treated medically, avoiding the need for surgery. This treatment involves maintaining good hydration of the patient with fluid therapy, drug therapy to manage pain and administering mineral oil via a nasogastric tube to help the passage of sand. Many veterinarians will recommend administration of psyllium, a bulk laxative, either in treatment or as a preventative of sand accumulation, however the benefits of this product have not been proven.

As it is difficult to determine the extent of sand impaction pre-operatively, most veterinarians will try to treat these patients medically in the hope that the patient will improve and begin to pass the sand in their feces, avoiding the need for surgery. Unfortunately the signs of colic may be too severe, or may worsen and the horse will have to be taken to surgery to resolve the impaction. The prognosis following surgery is usually good. If a large impaction is present however, and the decision to go to surgery is delayed the prognosis will worsen due to extensive abrasion of the intestinal lining that may occur.

The soil composition in Florida makes prevention of sand accumulation and impaction difficult. If possible, try to avoid grazing horses on overgrazed pastures or supplement sparse pasture with hay. Avoid feeding horses grain from the ground as they may ingest sand along with the feed. Psyllium or periodic mineral oil administration should be considered for prevention in at risk horses. If your horse shows signs of colic, contact your veterinarian who will try to determine the cause and can decide on an appropriate treatment plan.

- August 2008 - Eastern Equine Encephalitis—have you vaccinated
- July 2008 - Castration complications
- June 2008 - The use of acupuncture as a diagnostic aid in the equine lameness exam
- April 2008 - Current parasite control recommendations
- March 2008 - The use of Oxytocin in the post-partum mare
- January 2008 - Preparing your mares for the breeding season
- January 2008 - Proximal hind limb suspensory desmitis: (PSD): Part II: Treatment
- December 2007 - Pleuropneumonia - when shipping fever turns into a nightmare

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