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Crossroads Equine Veterinary Services, LLC

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The Crossroads Quarterly

What's New?

We want to reiterate our commitment to you and your horses. We have always made it a priority to be accessible and available for any needs that you may have for your horses, whether that is just calling for advice on a situation you may be having or sending a picture of a wound to see if it may be able to be sutured or not. We are here to take care of any routine situations or emergencies that you may be experiencing. We want to be your primary go to source for any need that might arise for you horses. No matter how small a matter that you think you have, we are here to serve. That is what we are here for. We have always said that if we don't have the answer, we'll find someone that does. If you are not happy with our service, please tell us. If you are happy with our service, please tell someone else.

Join us on Facebook. The link is www.facebook.com/#!/pages/Crossroads-Equine-Veterinary-Services/113768701969304 or search for Crossroads Equine Veterinary Services. I will post announcements for upcoming events.

As always, if you have a topic that you would like to see covered in a future issue, please e-mail it to me at crossroadsequinevet@gmail.com.

Reminders

Dangerous Grass—Usually I would be telling you that we are at that time of year again when the cool season grasses will have another growth spurt. However, we have had a really odd weather pattern this year and the cases of laminitis never really ended. We have continued to see cases scattered throughout the summer. Due to the milder, wetter summer, it seems the grass has been in a spring-like growth phase all year so far. Even so, it is very

common to have flare-ups of laminitis from the middle of September through the middle of October. Therefore, those horses that are prone to laminitis and foundering are at risk at this time. Take precautions to protect your horses. If you have any questions, call or e-mail.

Mosquito Borne Diseases—If you haven't vaccinated against mosquito diseases this year, now is a good time to boost. If you are due for your fall boosters, now is a good time to get them done. Because of all of the water that we've had this year, there is a greater population of mosquitoes. That means a greater risk for diseases like Eastern and Western Encephalitis and West Nile Virus. August and September are the peak months for those diseases. If you have any questions, call or e-mail.

Service Spotlight

Digital Radiography

This is a reminder that this practice uses **digital radiography**. It is a very beneficial piece of equipment. It allows us to do a more efficient job of diagnosing lamenesses and other disorders involving bone and joints. Perhaps the largest benefit to this technology is the ability to do everything that we need to do on the farm. We can take the radiographs and develop them at your farm and have an answer without having to go back to the office and developing films. That allows us to develop a treatment plan sooner. This is also of great benefit during a pre-purchase exam. Another convenience is that we are able to e-mail the radiographs to the university or another referral institution for a second opinion if we need a second set of eyes to look at the films.

This technology can be very beneficial if we are working together with your farrier. If the farrier has any questions as to what is going on inside the foot

or needs to do corrective shoeing, we can see what is going on inside the foot and put on shoes and then take another film to see if we accomplished what we wanted to do.

Product Spotlight

Quest Dewormer

ONLY QUEST® PLUS GETS RID OF THE MOST DANGEROUS PARASITES. Protect your horse from bots, tapeworms, encysted small strongyles, stomach worms and other common spring and fall parasites with QUEST® PLUS

(moxidectin/praziquantel) Gel. The only single-dose product that meets the AAEP's veterinarian-recommended deworming guidelines.

https://www.zoetisus.com/products/pages/questhorse/questhorse_home.aspx

Call with questions.

DNA Testing

Have you ever wondered what breed your horse is? We now offer DNA testing to determine breed makeup. It is a test that requires only a hair sample. Call with questions.

Disease Spotlight

DIARRHEA

What is diarrhea?

Diarrhea means the production of feces that are softer than normal. Normal equine feces are produced in formed, non-offensive smelling, greenish-brown, semi-solid portions that will break up in the hand, revealing varying degrees of fibrous content depending upon diet. The softness of diarrhea varies from non-formed ('cow-patty') to liquid (like colored water) and there may be an offensive smell. Liquid diarrhea may be produced apparently involuntarily in a projectile manner ('pipe stream') or may involuntarily run down the hind legs (incontinence), resulting in skin 'scalding'.

What is the significance of diarrhea?

Diarrhea is a relatively common condition in the horse and in most instances is transient. Due to the anatomy of the adult gastro-intestinal tract it is normally only conditions that affect the large bowel and cecum that result in diarrhea. In foals, before their large bowels are fully competent, i.e. before

three months of age, small intestinal conditions can be involved and foals can quickly become very ill.

Diarrhea may represent a simple digestive 'upset', e.g. following a sudden change in diet, when it causes no other significant illness. When caused by infection, intestinal parasitism or other significant gastrointestinal or metabolic abnormality, the horse may be clinically ill and need veterinary attention. Horses that are ill with diarrhea may show a variety of other symptoms which may include colic, inappetance, increased thirst, depression, weight loss, dehydration, pot belly, poor coat and dull eyes. Cases associated with cyathostomiasis (small strongyle worms), some cancers or other causes of protein loss can develop edema i.e. filling of the lower legs, ventral chest and abdomen.

What causes diarrhea in adult horses?

In many cases of adult equine diarrhea, the horse recovers before the cause is known. The horse's intestines, especially the large intestines and cecum, contain large numbers of 'normal' bacteria, of many different types, which are an essential part of the normal digestive processes. If the normal 'balance' of these bacteria is upset by a sudden change in diet or antibiotic treatment, digestion is upset and diarrhea may follow. When the normal bacterial population reorganizes and returns to normal, digestion and fecal consistency also return to normal. Treatment with probiotics (see later) may help a speedy return to normality and, if used early, before diarrhea develops, may sometimes help prevent diarrhea.

There are specific conditions that do require diagnosis and specific treatment.

Infections, such as salmonellosis (infection with *Salmonella* spp. bacteria) can cause symptoms ranging from acute, severe diarrhea to chronic, more insidious diarrhea and weight loss. Some symptomless carriers of salmonellosis only develop signs of diarrhea following treatment with antibiotics or hospitalization for surgery. Some species of salmonella bacteria can infect susceptible (especially young and aged) humans and animals and positive



Foal with diarrhea

cases should be put into isolation. Rarely, other bacteria such as *Clostridium* spp. can cause acute enteritis (inflammation of the small intestine), which can be rapidly fatal before diarrhea is produced. Less acute cases develop a foul smelling watery diarrhea.

Intestinal **Parasites** are an important cause of diarrhea in young and debilitated older horses, the most severe associated with cyathostomiasis. Cyathostomes are small strongyle worms, and during their lifecycle they migrate through and encyst (curl up and ‘hibernate’) in the wall of the cecum and large intestine. They cause no problems while encysted but during migration and particularly during emergence they cause considerable damage to the lining of the large intestine. This can result in profuse watery diarrhea and marked loss of water and protein, causing serious illness.

Stress associated with long transportation in hot conditions, general anesthesia and surgery may cause colitis (inflammation of the large intestine, i.e. colon) and this may result in massive fluid losses and the development of toxemia (formation, release and reabsorption of toxins or tissue poisons) secondary to damage to the gut wall. Horses with acute colitis are severely ill and require intensive care. Some cases are fatal. In some individuals, lower-grade stress e.g. pre-performance ‘nervousness’ may cause loose feces or even diarrhea, as is well recognized to affect some people.

Less common causes of diarrhea include intestinal neoplasia (cancer) and granulomatous enteritis (a chronic, i.e. long term, inflammation of the small intestines). Both may result in damage to and malfunction of the intestines, resulting in failure of reabsorption of water by and loss of protein through the intestines (malabsorption syndrome). This results in the production of fluid feces and progressive weight loss in affected horses, which may become life threatening.

How are the causes of diarrhea diagnosed?

In most cases it is obvious when a horse has diarrhea but often the difficulty is in diagnosing the cause. A veterinarian will perform a clinical examination and take a history, which will include medical and worming history, the duration of diarrhea and dietary changes, exposure to stress or surgery or other medical treatments and any history of other illness.

Blood and fecal samples may be collected for laboratory analysis. The fecal sample will be examined for parasitic worm eggs and cultured for bacteria. It may be useful to perform a rectal biopsy. This is accomplished in the standing sedated horse. In chronic or severe cases it may be necessary to take large or small intestinal biopsies either by laparotomy under general anesthesia or laparoscopically in the standing sedated horse.

How is diarrhea treated?

Many cases of diarrhea in adult horses are associated with transient digestive disturbances, do not require treatment and resolve quickly in a day or two. If the diarrhea is severe or symptoms persist then treatment is required. It may be necessary to commence treatment prior to a diagnosis of cause being made. Symptomatic treatment includes removing any obvious cause or exacerbating problems such as green grass, rich feed and antibiotic treatment. Water and electrolytes should be administered by allowing and encouraging access to drinking water to which electrolytes have been added. Always supply an alternative supply of drinking water without electrolytes in case the horse does not like the flavored water. If the horse is not drinking or is dehydrated, fluids can be administered by stomach tube or by intravenous drip. Intestinal absorbents and anti-diarrheals such as activated charcoal, bismuth salicylate, and kaolin may be administered by stomach tube as necessary. If there is pain (colic) associated with the diarrhea then analgesics may be used, such as Buscopan (a spasmolytic) or phenylbutazone (a non-steroidal anti-inflammatory and analgesic). Once the cause of the diarrhea is known, specific treatment should be introduced. In cases of cyathostomiasis, corticosteroids are sometimes given alongside symptomatic treatment and larvicidal (high) doses of appropriate dewormers. These cases may also require intensive nutritional (especially protein) and fluid

supplementation and antibiotic medication, as they are often severely debilitated and secondarily infected. In cases of salmonellosis and other bacterial



Mare with diarrhea

infections, there is still some debate as to whether antibiotics should be used, as they are often ineffective and may promote antibiotic resistance in the bacterial population. Other conditions that require specific treatment and management include granulomatous enteritis and neoplasia.

Severe cases of diarrhea and colitis are life threatening and require aggressive intensive care. Fluid and electrolytes are lost in large amounts and a combination of reduced digestion and absorption and increased loss of protein due to intestinal inflammation can result in profound weight loss and debility in a very short period of time. If the lining of the gut is severely damaged or, in certain intestinal bacterial infections the lining of the gut, is so severely damaged that the horse can become toxemic, i.e. toxins produced by bacteria in the gut are absorbed into the blood stream. The toxins can damage large intestinal blood supply irreparably, the gut wall dies and these horses develop shock and die or require euthanasia quite quickly despite treatment.

How is diarrhea prevented?

Diarrhea is best prevented by good management, with provision of good quality pasture and feed and any changes in diet made gradually. A strategic parasitic worm control program appropriate to the management is essential, with twice yearly (spring and autumn) anthelmintic dosing specifically to control small strongyle worms (cyathostomes) and tapeworms. Contact with known Salmonella spp. carriers should be avoided.

Some horses tolerate stress less well than others and it is difficult to predict which horses may develop diarrhea or colitis following stressful conditions or situations such as competitions or surgery but one must always be aware of the possibility.

When should I call my veterinarian?

You should call your veterinarian if your horse appears unwell (depressed, dehydrated, behaving abnormally or in pain), the mucous membranes in the eyes and mouth appear congested (red rather than pink) or if the diarrhea has persisted for more than 2-3 days.

Q & A

Q: How do I know if my horse needs dental work performed?

A: There are several different signs that would point to your horse's teeth needing some attention. The most common sign that people notice is the horse dropping grain when he eats. This is a very good sign that he needs some dental work. Also, fighting at the bit, tossing his head a lot when riding, and sometimes reluctance to turn in one direction can indicate a dental problem. If your horse doesn't seem to be holding his weight properly, it is a good idea to rule out his teeth as a contributor to the problem. Sometimes, your horse may not show a problem visually. I see horses all of the time with a lot of sores in their mouth from the sharp points that wear on the teeth or severe dental abnormalities, and they were showing no outward signs of a problem. As a general rule, I like to perform a thorough dental prophylaxis at least once a year whether they are showing outward signs or not. An older horses' teeth do not grow at the same rate as younger horses. A lot of times, they can go every other year without actually being filed. However, thorough dental exams are still important at that age to insure there are no loose teeth or other problems. If you wait until a horse of any age is having problems, he may already have significant dental abnormalities that will be more involved and more expensive to correct. If you have any further questions or concerns, don't hesitate to contact me.

Practice News

Deworming Program

Are you tired of wondering what dewormer to use? Are you tired of thinking about when you last dewormed or if it is time? Give us a call and we can help.

*As always, thanks for supporting
Crossroads Equine.*
