



Volume 1, Issue 1

Newsletter — October, 2016

...Experience, Innovation, Dedication.

What is a Veterinary Internship?

You may have met our intern, Dr. Margaret Bojko, at some point over the last few months. What is a veterinary intern you may be wondering? An internship is a yearlong program for licensed veterinarians after graduating veterinary school. A veterinary internship allows the new veterinarian to pursue advanced training with the latest diagnostics and procedures in their chosen field, while having the added benefit of practicing under the mentorship of experienced veterinarians. A veterinary internship is not required and new veterinarians can choose to enter these programs before venturing off on their own. At Allegheny Equine, we hope that

through this internship program we can help new graduates succeed and flourish in their careers in equine veterinary medicine.

Meet our Veterinary Intern for 2016-2017

Dr. Margaret Bojko joined Allegheny Equine in June 2016 as the 2016-2017 intern. Originally from a suburb of Chicago, IL, she started riding Saddlebreds at a young age before transitioning to the stock horse world of barrel racing and working cows. Dr. Bojko attended the University of Illinois in Urbana, IL for her undergraduate studies, where she

earned her Bachelor's degree in Animal Science, and was a member and coach of the western equestrian team. She received her Doctorate of Veterinary Medicine from the University of Illinois. During her stay at the University of Illinois she devoted much of her time to local animal rescues by fostering dogs and rehabilitating and training horses. Dr. Bojko enjoys all aspects of veterinary medicine with her main interests being reproduction, preventative medicine, and internal medicine. In her spare time, she enjoys traveling, hiking, and going for a nice trail ride on her Paint Horses Ziggy and Star.



Dr. Margaret Bojko

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Introducing Dr. Ruthie Lindberg



We are pleased to introduce Dr. Lindberg who joined us in July! She is a native of Miami, FL but traded in her flip flops for snow boots to attend Middlebury College in Vermont for her undergraduate education. Dr. Lindberg attended veterinary school at the University of Pennsylvania. Following graduation in 2014, she completed an intensive one year internship at Rhinebeck Equine in central New York in internal medicine, surgery, and ambulatory services. She then returned to eastern Pennsylvania to work in

ambulatory practice. Professionally, Dr. Lindberg especially enjoys internal medicine, reproduction, and neonatology. Additionally, she received her veterinary acupuncture certification in 2014. Please join us in welcoming Dr. Lindberg to Pittsburgh!

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Case report: Acute Diarrhea in an Adult Horse



Watery diarrhea is a serious problem in the adult horse.

"Right Dorsal
Colitis is
associated with
overdose or
prolonged high
doses of nonsteroidal antiinflammatory
drugs (NSAIDS),
such as
phenylbutazone
(bute) or
Banamine."

By Dr. Ruthie Lindberg

History: Toby is a 6 year old Norwegian Fjord gelding. Over the past two days he has developed pipe stream diarrhea. One month ago, Toby had an episode of laminitis. Due to miscommunication, he was subsequently treated with 2grams of phenylbutazone ("bute" an anti-inflammatory medication) twice daily for one month.

Examination: On initial presentation. Toby was quiet and alert with a normal temperature. His heart rate was very high at 90 beats per minute (normal for a horse is 25-45 bpm) and he had edema (swelling) along his abdomen. He was shifting his weight around on his front legs and his digital pulses (pulse around the back of the fetlock region) were increased. His bloodwork showed low protein, a high white cell count, moderate dehydration, and elevated kidney values. Radiographs were taken of his feet and no rotation or sinking was seen, however chronic laminitic changes were present on all four feet. Diagnosis and assessment:

Sudden onset diarrhea, or

colitis, in the adult horse is a

serious problem. The term "colitis" refers to inflammation of the colon. Dehydration can set in quickly and the horse's overall condition can deteriorate rapidly. Another concern for horses with colitis is the development of laminitis (inflammation of the sensitive tissues [laminae] within the hoof). When the colon wall is inflamed, toxins can leak from the colon into the bloodstream and result in laminitis. Causes of diarrhea can include infectious disease, such as Potomac Horse Fever (spread by mayflies) or bacterial infection, antibiotic associated diarrhea, or other causes. Frequently, a true cause of diarrhea may not be determined. Toby has a classic and severe presentation of right dorsal colitis (RDC). Right dorsal colitis is associated with overdose or prolonged high doses of nonsteroidal anti-inflammatory drugs (NSAIDS), such as phenylbutazone ("bute") or Banamine. Additionally, prolonged NSAID use can result in kidney damage. The combination of NSAIDs and dehydration from diarrhea can be very toxic to the kid-

Treatment: Toby was admitted to the hospital for inten-

sive treatment. He was put on intravenous fluids, antibiotics, gastroprotectants, antidiarrheals and pro-biotics. Nutritional support is also important for cases of colitis and Toby was offered easily digestible feeds. His feet were iced to prevent further progression of laminitis. Over the next three days, his attitude and comfort level dramatically improved. Serial bloodwork showed improving white cell counts and protein levels. He was slowly weaned off of IV fluids.

Outcome: After about a week in the hospital, Toby was able to go home. He was kept on a diet of chopped hay for the next month to help his colon heal. Soft-Ride Boots© were used to keep his feet comfortable. For the future, Toby will have to avoid NSAIDs unless absolutely necessary.



Radiograph of rotation due to laminitis.

Looking for your horse's Coggins or Health Certificate? Connect with Global Vet Link at www.myvetlink.com and download these important documents anywhere or anytime!



Preparing the older horse for winter

By Dr. Dara Brown

As the temperatures start to drop, our geriatric horses may require a bit more attention than the rest of the barn. Along with routine vaccines and fecals, there are a few extra areas for consideration.

One of the biggest areas of concern is weight, or body condition. Grass is in short supply in our region in the winter, so horses that rely on it for a large portion of their calories may drop weight.



Dentition is particularly important for the senior horse.

Older horses often have a harder time eating hay due to dental issues. Getting their mouth checked by a veterinarian before winter is a good idea to make sure their teeth are in the best shape possible. As horses age, they may lose some teeth. This results in overgrowth of opposing teeth,

which in turn can cause ulceration, pain, and disruption of normal chewing motions. The chewing surfaces of teeth also become smoother with age, making it harder to break up hay. If, even after proper dental care has been provided, your horse is still unable to chew hay well, they may require major dietary changes. This can involve replacing traditional hay with other hay products, such as forage or pellets, as well as changing the type and amount of grain your horse receives. Your veterinarian can help you decide what changes need to be made for your specific horse.

Another area to consider with the older horse, especially going into winter, is whether they have Cushing's disease. Cushing's disease, or Pituitary Pars Intermedia Dysfunction, is very common in horses in their late teens and twenties. While the hallmark sign of this disease is the inability to shed out in the spring, many Cushing's horses do not have issues shedding. These horses can often only be detected as affected on a blood test. As it gets colder, it is important to identify these horses because they can have a hard time regulating their body temperature, and may require blanketing. Years ago, veterinarians were unable to test for Cushing's disease in the fall due to natural elevations in ACTH during that season, however, new reference ranges have been developed that allow for year-round testing.

Finally, as many of us know, aches and pains can become more apparent in colder weather. Arthritis is very common in our older horses, and even those that move around well most of the year can seem more stiff or uncomfortable when the temperature drops. This can be managed a variety of ways, including systemic medications, local therapies, and integrative care such as chiropractic and acupuncture. Your veterinarian can help you figure out which treatments are best for your horse.

Cushing's disease or Pituitary Pars
Intermedia
Dysfunction, is very common in horses in their late teens and twenties.



The classic long hair coat of a horse with advanced Cushings.



What is that green stuff coming out of my horse's nose?



Feed material coming out of the nose due to

When a horse chokes, there is an obstruction in their esophagus, which is the long muscular tube that carries food from the back of the mouth to the stomach.



A choking horse may stretch his neck, yawn and cough.

By Dr. Alexis Baney

It's Friday night at 7 pm. You stopped in at the barn to visit with your horse after work and notice that he is stretching out his neck and has a large amount of green/tan discharge coming out of both nostrils. Part of his grain meal is still in his feeder. He is occasionally coughing and seems a bit distressed. Where is that coming from? What should you do?

- 1. Place your horse in a stall without feed (hay, grain or treats) or water.
- 2. Call your veterinarian.
- 3. Keep your horse as calm as possible and their head down to promote drainage out the nose and mouth.

The answer is ALL OF THE ABOVE! Your horse is choking. Don't panic, it's not the same as when a person chokes and has something stuck in their trachea (airway); a horse is still able to get air into their lungs. When a horse chokes, there is an obstruction in their esophagus, which is the long muscular tube that carries food from the back of the mouth to the stomach. When a horse takes food into their mouth it gets transported into the oropharynx (back of the throat). It is then involuntarily passed through the momentarily relaxed upper esophageal sphincter which then closes immediately. The lower esophageal sphincter opens

and esophageal peristalsis (contractions of the muscle) propels the food bolus into the stomach.

What can cause a choke?

An esophageal obstruction (choke) occurs when there is an impaction of food material in the esophagus that causes difficulty swallowing. There are two basic types of choke; simple or primary impactions and complicated or secondary impactions. Simple chokes can be caused by roughage, bedding, grass or grain. Horses can be predisposed to choke due to bolting of food, poor dentition, new food types, food that is too dry, cribbing or prior esophageal trauma. Secondary impactions can be caused by foreign bodies, masses (within the esophagus or on the outside pushing against it, acquired or congenital anomalies (diverticulumblind sac within the esophagus, stricture- area of narrowing, cysts-fluid filled sacs).

So now you know what a choke is. What are some signs of a choke?

Typical clinical signs of choke include anxiety, neck extended or flexing/extending neck intermittently, gagging or retching, frothy nasal discharge containing food and saliva, coughing, excessive salivation (drooling), distension of the jugular furrow at the site of obstruction within the esophagus. Choke is fairly easy to diagnose by clinical signs and passing of

a nasogastric tube. The esophagus can also be evaluated with an endoscope in order to actually visualize the blockage. An endoscopic exam is typically only performed when a choke cannot be relieved.

The goal of treatment is to relieve the obstruction. In order to do this, your veterinarian will sedate your horse heavily so his/her head is hanging low to the ground. They will also administer an antiinflammatory such as banamine to help decrease pain and inflammation in the esophagus. A smooth muscle relaxant such as oxytocin or buscopan may be administered as well. A nasogastric tube will be passed up the nose and into the esophagus until it meets resistance. This is likely the location of the obstruction. Water is pumped into the tube in order to break up the obstruction. Obstructions that are relieved easily do not usually have complications. During a choke, horses may breathe in some of feed/saliva into their airway, which can cause aspiration pneumonia (bacterial infection within the lungs).

(Con't on Page 6)



Dental and Ocular (eye)
Exam as part of the
Annual Physical

...annual physical examinations are an important component to the overall wellness status of your horse.



Physical Exam & Body Condition Score and weight

The Annual Physical Exam

Do you ever wish your horse could talk? There are probably at least a dozen topics that you would love to discuss with your horse if that were the case. But is wellness a topic that comes to mind? The lack of verbal communication often makes it more difficult for owners and veterinarians to monitor overall health and changes over time. No one likes going to the doctor, but annual physical examinations are an important component to the overall wellness status of your horse. These exams aid vour veterinarian in determining your horse's baseline health parameters and in monitoring any changes that occur in the future.

Depending on the circumstances, physical exams can range from brief to extensive. A brief physical exam may simply consist of temperature, heart rate and respiratory rate, as well as auscultation of the heart, lungs and gut. An exam may also be tailored to the problem at hand, such as lameness, in which cases your vet will do a more thorough examination of muscle, tissue, movement, etc.

Most commonly, an annual physical examination is a much more thorough evaluation of your horse's overall condition and health. It may include body weight measurement and body condition scoring, dental evaluation, ocular (eye) exam, auscultation of the heart, lungs and gut, evaluation of the sheath and penis in stallions and geldings, and hoof care.

An apple a day keeps the doctor away, but too many apples (or treats) could cause unexpected weight gain. Just like their human counterparts, horses can also have weight fluctuations over the course of a year. Taking weight tape measurements and recording a body condition score each year are good ways to monitor for any drastic changes in your horse's overall weight and fitness. There are so many factors that can alter body condition and weight control, so many in fact, we could write another article on body weight altogether! The real importance of tracking the body condition score on a yearly basis is acknowledging drastic changes in body weight. Changes may be a symptom of an underlying condition that requires further investigation.

Dental exams should be performed yearly and can range from a quick glance in the mouth of an unsedated horse, to a sedated exam using a dental speculum, which provides opportunity for a more thorough evaluation of the teeth. Your veterinarian will evaluate the mouth for sharp enamel points on the molars, general alignment of the teeth, look for fractures or loose teeth, as well as soft tissue ulcerations on the cheeks and tongue, to list a few components. Choice of an un-sedated versus sedated exam may depend on patient coopera-

A basic eye exam will be performed to evaluate the outer and inner structures of the eye, looking for any abnormalities to include cataracts, inflammation or decreased vision.

Every physical exam should include an evaluation of the heart, lungs and gastro-intestinal tract. This is important in evaluating whether or not there are any abnormalities such as a heart murmur or arrhythmia, increased or abnormal lung sounds and presence of normal gut sounds.

Geldings and stallions should have their sheath and penis evaluated at least once a year as most of the time it is not able to be observed well in the absence of sedation. A great time to do this is when the horse is sedated for a dental procedure or following their annual physical examination. Hoof care is also very important and should not be overlooked. Examination of the hoof allows for veterinarians to make suggestions about shoeing based on observation and farrier xrays evaluating hoof balance and bony alignment. It will also give them the opportunity to identify any problems. All of these physical exam components provide us with a normal baseline for your horse and help us to detect any changes or abnormalities.

(Con't on Page 6)

What is the green stuff (con't)

Your horse will usually be placed on an antibiotic as a preventative measure. They will also be placed on a strict diet for at least 24 hours, as the esophagus is usually fairly inflamed. If your horse has been known to bolt their feed, your veterinarian may advise that you add large rocks to their feed bin, use a slow feeder and/or havnets to slow them down. Often times, choke episodes resolve on their own once the horse relaxes, however it is always important to call your veterinarian. Horses can have permanent damage to the esophagus, develop aspiration pneumonia and become dehydrated if choke is not

resolved If a choke is not able to be

be recommended.

resolved easily on the farm, a hospital

referral and/or endoscopic exam may





Alleghenv Equine: 5015 Sampson Ln Murrysville, PA 15668

Volume 1, Issue 1 Annual Physical Exam (con't)

Many other things can be evaluated in conjunction with the annual physical exam such as baseline blood work, fecal parasite testing, microchip implantation/identification, Equine Infectious Anemia (Coggin's) testing, testing for PPID (Equine Cushing's) and/or Equine Metabolic Syndrome. It is important for you and your veterinarian to discuss your horse's medical history and the health risks associated with their lifestyle and activities. Your veterinarian can create a tailored individual annual wellness exam and program for your horse.

In the spring of 2017, Allegheny Equine will be incorporating annual wellness physical examinations into our spring vaccination visits. We feel that a thorough annual physical exam is an essential component of your horse's individual health care plan. We are dedicated to your horse's overall well-being and feel that annual physical exams are critical to early detection of health changes and proactive preventative care.

Equine Metabolic Disease and Cushings: Who is at risk?

Is your horse an easy keeper? Fighting laminitis? Having issues with chronic infections?

Join us on Nov 12th, 2016 for our Client Education Seminar.

10am-12 noon

We will discuss diagnostics, management and treatment options of EMS and Cushings. Bring your questions and thoughts! RSVP is not necessary, but is appreciated. Check out our event on Facebook or call at

724-325-4615.

