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Summer 2008 Newsletter
www.saratogaequine.com

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SEVS Welcomes Back Dr. Mary McDowell

Dr. Mary McDowell returns to Saratoga Equine Veterinary Service after receiving her DVM from the University of Minnesota College of Veterinary Medicine in 2008. Some of our clients may remember Dr. McDowell from her time with us as an extern last summer.

Dr. McDowell completed her undergraduate studies in zoology at the University of New Hampshire after working as an electronics technician in the Navy, a job that took her to Hawaii, Alaska, and the Far East, amongst other locations. At Saratoga Equine, Dr. McDowell joins the veterinary team with her primary clinical interests in reproductive medicine and ambulatory care. Dr. McDowell enjoys all aspects of horsemanship. She has experience trail riding, and hopes to continue to advance as a dressage rider. Additionally, Dr. McDowell has dedicated her time to working with handicapped riders in specialized programs. **Welcome to Saratoga Equine, Dr. McDowell!**



Eliminating Fungus

As the summer months are upon us, the warm weather and humidity make fungus a serious problem. Fungal dermatitis, more commonly known as fungus, rain rot, or scratches, is caused by fungal organisms on your horse's skin that cause irritation and itching. When not treated properly, this can lead to open sores, which allow the infection to spread. A fungal infection of the subcutaneous tissues can cause swelling, pain, and lameness.

There are several things that you can do to treat fungus on your horse. First, you should apply an anti-fungal shampoo to the entire horse. Many of these products are extremely concentrated, so be sure to dilute the shampoo as appropriate. The shampoo should sit for up to fifteen minutes before being rinsed off. After completely rinsing the horse, let your horse dry. Towel-drying your horse's legs will help to ensure that they are completely dry. Once your horse is dry, you can apply an anti-fungal ointment or cream to the infected area to help further fight the fungus. In order for the treatment to work, you must ensure that you have effectively killed all the fungal organisms. When this is done, you should have eliminated the itching and scratching, as well as the inflammation and pain in the infected and surrounding areas. This will help the horse quickly heal open sores or wounds from the infection, and it will help prevent the fungus from returning and causing a second infection.

No matter how good of a job you do treating the fungus, there is always a chance that it will come back later in the season. Anti-fungal shampoos and ointments can be purchased through your local tack store or through Saratoga Equine.

(Treatment plan provided by the Atlanta Equine Clinic)



Safety First

By Dr. Mary McDowell

A medical emergency with your horse can be a frightening and stressful event, but taking the time to get organized now could save your horse's life if an emergency situation arises. It is important to keep a well-stocked first aid kit for your horse at the barn (and one on the trailer when transporting your horses). You can buy pre-made equine first-aid kits at your local feed or tack store or you can easily make your own. Here's a basic list of what you need to get started:

1. STORAGE BOX

Use a sturdy container with a lid to keep all your first-aid supplies clean, dry and in one easy-to-find place. Label the box clearly and list its contents for easy reference in case of emergency. Be sure everyone with access to the barn knows where the kit is kept. Also, use supplies only for first aid and immediately replace any items once they are used (it's tempting to pull things like bandaging material out for non-emergencies, but not helpful when you really need them later and they are missing).

2. TOOLS

- Bandage scissors
- White medical tape
- Duct tape - handy for taping hooves (but never use around leg to secure bandages)
- Latex gloves
- Rectal thermometer
- Stethoscope - for listening to heart rate and checking gut sounds
- Clean syringe (without needle) – to flush sterile water into wounds
- Tweezers or forceps – to remove splinters
- Flashlight & fresh batteries
- Clean towels
- Twitch



3. BANDAGING SUPPLIES

- Cotton pads (Feminine pads and disposable baby diapers make excellent bandaging supplies. The pads fit nicely against legs and the sticky back adheres to the bandages, helping to keep the dressing in place. Diapers can absorb lots of blood or can be duct taped to the hoof.)
- Cotton roll (several packages)
- Elastikon (elastic tape)
- Polo wraps
- Vet Wrap (flexible, self adhesive tape)
- Sterile non-stick pads – to place over wounds after they have been cleaned (large Telfa pads work well)

4. OINTMENTS, SOLUTIONS, MEDICATIONS AND MISCELLANEOUS SUPPLIES

- Antibiotic ointment
- Betadine (povidone-iodine) – an antimicrobial solutions that can be diluted with sterile water (to the color of weak tea) to clean fresh wounds
- Electrolytes (powder or paste)
- Epsom salts – for soaking hooves
- Petroleum jelly or water based lubricant (to lube rectal thermometer)
- Sterile saline – for flushing eyes (a bottle of plain saline solution for contact lenses works well)

*Any drugs kept on hand should be used only on the advice of a veterinarian and only used after significant instruction. Depending on the circumstances, the indiscriminate use of pain medications such as phenylbutazone (Bute), Banamine, or any antibiotics can have severely negative consequences if used incorrectly.

FIRE SAFETY CLINIC!

When disaster strikes and barn safety is compromised, what do you do? Saratoga Equine is proud to offer a barn safety preparedness workshop, hand-in-hand with emergency personnel. **Check www.saratogaequine.com for upcoming details!**



The Summer Horse

By Dr. Sandy Tatarynw

The summer is typically the best time to be a horse owner in upstate New York, as warmer weather means more time spent outdoors for everyone. However, there are precautions to take, especially during extreme heat, to keep your horse healthy and comfortable.

Dehydration

The increased temperatures and humidity mean increased sweating for your horse, which is the major means of cooling the body. An average horse will drink from eight to twelve gallons of water per day. A horse that is working heavily during a warm day can lose up to four gallons of water each hour, in addition to thirty teaspoons of salt lost in sweat. It becomes extremely important to provide clean, fresh water for your horse during summer months, in addition to a salt and/or mineral block.



If your horse is not a good drinker, you can try adding one to two tablespoons of salt to the horse's grain to encourage drinking. In

addition, you can administer electrolytes, which can be very beneficial to horses that are working hard in the heat. Electrolytes can be bought in either paste or power form, which can be given orally or added to a horse's food or water. If you are adding them to your horse's water, you should always provide another bucket of plain water in case the horse does not like the electrolyte taste and ends up not drinking at all. It is also important to provide water when transporting your horse.

Heat Stress

When a horse gets too hot or doesn't drink enough water in the heat, it can develop heat stress. Signs of heat stress can include an increased respiratory rate of 40 to 50 beats per minute or higher or an increased heart rate of 80 beats per minute that lasts longer than two minutes after the horse has stopped working. Other signs include profuse sweating or no sweating, a body temperature of 103 degrees or above, lethargy, and mucous membrane color that is muddy or dark red.



Lack of sweat can be more alarming than profuse sweat.

Inadequate sweating is called anhidrosis, and this occurs when a horse's sweat glands become overtaxed and are unable to excrete fluids. This causes the body temperature to rise to dangerous levels. If a horse appears to have heat stress or anhidrosis, you should contact your veterinarian. You should also place the horse in the shade, remove all tack, cold hose or douse the horse with ice water, place a fan in front of the horse, and offer cool water to drink. The best way to avoid heat stress in horses is to keep your horses out of the direct sun and heat. If heat and humidity indexes are particularly high, consider not riding, or skipping a show.

Turnout Related Injuries

There are other aspects of summer besides the heat that can be a danger to your horse. Insects can transmit diseases, including Potomac Horse Fever, West Nile Virus, and Eastern/Western Encephalitis. Make sure your horse is vaccinated in the spring for these. Horses can also contract Lyme disease from ticks. There is currently no equine vaccine for Lyme, but

using tick and insect repellent on your horse will help, as well as keeping pastures mowed down. New grass growth in the spring or summer can cause horses to colic or founder. To avoid this, introduce horses to new lush pastures gradually. Some horses that are prone to founder may need to be kept on a dry lot or wear a grazing muzzle.



Horses also tend to be more prone to eye injuries during the summer, due to the amount of flying insects around their face. They may inadvertently damage an eye while rubbing their face on a fence or wall. If your horse's eye is swollen, tearing, or looks cloudy, contact your veterinarian immediately. Not treating an eye infection or eye ulcer can lead to loss of vision in the eye. Horses can also sunburn, so sunscreen should be applied to the horse's face as needed when being turned out in direct sunlight.

Lastly, horses are outdoor animals, so do not be afraid to turn them out or ride them in the summer. By taking precautions, most horses will be happier and healthier when getting regular turnout and exercise.

We Need Your Email Address!



SEVS is updating our address books. Along with your correct mailing information, please send us your email address, either by calling us (518) 583-7273, or by emailing us at saratoga@saratogaequine.com.

A New Approach to Lameness By Dr. Axel Sondhof



As high performance athletes, horses often experience bone and soft tissue injuries at some point in their lives, which may result in debilitating disease or a career-ending event. In the past, treatment options for arthritic conditions and injuries to tendons and ligaments were limited, and often required prolonged periods of rest with no

guarantee for a successful return to the previous performance level. Even with advanced surgical techniques, the outcome and prognosis in many cases was limited. Over the recent years, new treatments have been developed to target specific lameness problems, such as degenerative joint disease (arthritis), and tendon injuries (tendon-and ligament tears). These fairly new treatment options include Stem Cell Therapy, Platelet Rich Plasma (PRP), and Interleukin Receptor Antagonist Process (IRAP).

Stem cell therapy has made its way into the equine world due to the fact that it seems to help healing certain injuries better than any other treatments currently in use.

Stem cells are undifferentiated cells capable of replicating themselves, and have the potential to differentiate into specific cell lines, such as collagen fibers (the make up of tendons and ligaments). There are three main sources for stem cells: embryos, bone marrow, and fatty tissue. Stem cells derived from bone marrow and fatty tissue are the most commonly used for injection into tendons and ligaments (such as core lesions, a hole in the tendon). We harvest the tissue or aspirate directly from the horse itself and process the material before injection. Excellent results have been shown with certain injuries, although it has yet to be determined as to which form of stem cells provides the best environment for healing.

Platelet Rich Plasma provides a number of anti-inflammatory mediators and growth factors that may also help improve healing of tendon injuries. Particularly severe injuries, such as an acute tear resulting in a core lesion in the superficial digital flexor tendon, appear to benefit from PRP injections and seem to provide a better healing environment. Even more recently, chronic injuries seem to remodel better when PRP is combined with Stem cells since the PRP may provide a matrix for the stem cells to grow.

A thorough examination including an ultrasound exam and radiographs are required to customize the available options to the individual horse. Ultrasound guided injection for tendon injuries is a crucial tool to make sure that the injection targets the injured area. Please feel free to inquire more info about these treatment options, as they are further developing and maturing. We will be happy to discuss any questions you may have regarding your horse.