U of M Horse Newsletter

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Volume 7, Issue 3

March 2011

UNIVERSITY OF MINNESOTA EXTENSION

Stall Rest Concluded

By: Erin Malone, DVM, Univ. of Minn.

Ready to limbo? While stall rest can help injured tissues heal, it can stress other tissues. Muscles and joints get stiff, especially in older horses with arthritis. Massage can help keep the joints limber and it feels good.

Have your vet show you some stretching exercises to maintain joint range of motion and mobility. You do need to ensure that all exercises are safe concerning your horse's injury. With some regular work, he may be more limber when you finish the recovery than when he started. While you are at it, ask for extra bedding. The extra cushion can really help when standing around all day and make laying down much more comfortable

Consider a rehabilitation farm. One way to make sure your horse isn't the only one on stall rest is to board at a rehabilitation facility. These barns are used to the restrictions, and there is usually a lot of company inside. Sometimes the new environment helps make the transition easier. Plus, the staff will be better able to withstand the sad looks from the horse and can better follow the veterinarian's instructions.

Still frustrated? Talk to your veterinarian. There may be a middle ground that is safer for your horse than strict stall rest or total turnout. Don't forget to monitor his health. Changes in activity make a horse more prone to colics and stall rest can make them more prone to stomach ulcers. Be sure to monitor his manure, appetite and attitude closely and consider a stomach protectant. Watch the barn ventilation as well; make sure the bedding is cleaned frequently and good airflow exists to minimize the risk of respiratory irritants. Don't forget to take care of yourself; ask a friend to assist you or hire a competent person to give you a break from the caretaker role!

Transitioning out. When the stall rest is over, try to minimize any risk of reinjury on turnout. Your horse has lost some condition, is likely to be overexcited and may need to reassert his role in the herd. Consider not feeding the horses until they are outside, this will give them something else to think about. Turn out with one or two buddies vs. the whole herd or perhaps sedate the horse at first (acepromazine can work well to help mellow out the return the first few days). Turn out during the heat of the day when everyone moves a little slower and supervise turnout. Finally, make sure to start with just a few hours. You can pull the horse back in if it is too exciting and don't turn out into a lush pasture due to the risk of laminitis. Start small; the arena or small paddock may be better than the back 40 acres. Avoid round pens or paddocks with rounded corners as they tend to encourage running in circles which is hard on a healthy body, much less one that is out of shape. Corners tend to make a horse stop.

Rebuild slowly. Don't forget he has lost muscle tone and can't do as much as he used to right away. Keep up your stretching exercises and avoid repetition until he has his strength back. Unless you are working with a specialized rehabilitation program (i.e. aqua-treadmill) or found a way to keep his muscles toned during the layup, plan on at least 3 months of gradual return to work, longer if he was stall rested for more than 3 weeks. Rechecking radiographs and ultrasound are often useful to ensure you are moving as fast as possible without causing reinjury.

With patience, time and attention to details, you will give your best friend the best chance of coming back as good as new!

Inside This Issue

Upcoming Events

Advanced Hands-on Series
6:00 to 8:30 pm
U of M Equine Center
St. Paul, MN
$20 each or $50 for all 3

March 1: Feed Tags

March 8: BSC & Weight
To register:
www.regonline.com/BCSW

March 22: First Aid
Session Full

Free Stallion Castration Clinic
Saturday, April 16, 2011
Cold Spring, MN
Stallion owners must be referred by a certified horse rescue, humane agent or their veterinarian based on an economic hardship. Stallions must be halter broken, have two descended testicles and be in good health. Castrations must be scheduled in advance and appointments are limited. Contact Krishona Martinson at 612-625-6776 or krishona@umn.edu to schedule an appointment.

2011 MN Horse Expo
April 29 to May 1
St. Paul, MN

Club Feet in Foals: Diagnosis and Management

"Club foot" refers to a limb deformity where the hoof has a very upright appearance with a long heel (see Figure 1). This condition is also known as "contracted tendons", and it is one of the most common tendon deformities in foals. Anatomically, the deep digital flexor tendon (DDFT) is proportionally shorter than the bones, causing a deformity in the limb by pulling on the coffin bone (bone in the hoof).

Figure 1. Club foot, Stage I deformity

The typical hoof conformation seen in these foals is caused by the downward rotation of the tip of the coffin bone by the DDFT. The severity of the rotation is classified as stage I or stage II. A stage I deformity is present when the front of the hoof is less than vertical or vertical (Figure 1). With stage II contracture, the dorsal hoof wall passes beyond the vertical (tips forward) (Figure 2).

Figure 2. "Club foot"; stage II deformity

In general, the forelimbs are more commonly affected than the hindlimbs. In most cases the problem is seen in both forelimbs, one of them being more severely affected. If the deformity is present at birth, it is referred as congenital deformity. This type of deformity occurs within the mare´s uterus and is likely due to multiple factors. Acquired flexural deformities are those that develop after birth. In these cases, the bone grows at a faster rate than the tendon. Foals are more susceptible if they are nursed by heavily lactating mares, have a genetic tendency to grow quickly and/or are supplemented excessively with concentrates (proteins, carbohydrates, minerals or vitamins).

Newborn foals with severe congenital deformities may be unable to stand up and nurse appropriately. Prompt medical treatment is needed. Oxytetracycline, pain relief and splinting or casting are used to relax the tendons. Trimming or rasping of the heel helps to stretch the tendons and may be combined with toe extensions (Figure 3). Mild cases of contractural deformities respond to this treatment with complete correction. In more severe cases, surgery is required to obtain a positive outcome.

Figure 3. Toe extensions

In cases of foals with acquired flexural deformities (from 3 months to 3 years of age), a balanced diet needs to be implemented and suckling foals should be weaned. Exercise is also important to the recovery process. As with the congenital contractures, these young horses must be able to stretch their tendons to correct the problem, but pain can often be associated with stretching. Analgesics are often needed to encourage exercise and stretching. Trimming of the excess heel and toe extensions are recommended to promote stretching of the tendon. Surgery is used for severe cases and for cases that are not responding to medical treatment and corrective shoeing. The treatment of choice for stage I club feet is cutting of the check ligament of the DDFT. This ligament acts as a "check rein" on the tendon and the surgery allows more stretch. This procedure also needs to be combined with analgesics, physiotherapy and orthopedic trimming/shoeing to achieve the best possible result. Young horses respond better than older horses but it can be done at any age. Severe stage II contractural deformities require cutting the DDFT for a successful correction. This treatment was initially considered as a salvage procedure; however, several horses have turned into sound riding horses after the surgery.

The prognosis for foals with mild to moderate "club feet" that are managed appropriately is good. The earlier treated the better the prognosis. Those treated before 6 months of age had significantly higher success rates. In severe cases, the prognosis remains guarded. Horses that don't respond to treatment tend to have more coffin joint pain and hoof deformities due to the upright hoof conformation.

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