Blanketing

Most horse owners are not sure when, or even if, they should blanket their horse. However, blanketing a horse is necessary to reduce the effects of cold or inclement weather when:

- There is no shelter available during turnout periods and the temperatures drop below 5°F, or the wind chill is below 5°F
- There is a chance the horse will become wet (not usually a problem with snow, but much more of a problem with rain, ice, and/or freezing rain)
- The horse has had its winter coat clipped
- The horse is very young or very old
- The horse has not been acclimated to the cold (i.e. recently relocated from a southern climate)
- The horse has a body condition score of 3 or less

It is equally important that the blanket fits the horse. Horses can develop rub marks or sores where the straps secure the blanket if it fits improperly. If the horse is blanketed continuously, the blanket should be removed daily, inspected for damages, and repositioned. Make sure blankets are kept dry and do not put a blanket on a wet horse; wait until the horse is dry before blanketing.

The equine hair coat acts as insulation by trapping air, however, if the hair is wet or full of mud, air is excluded, reducing its insulating value and increasing heat loss. As little as 0.1 inch of rain can cause cold stress by matting the hair and reducing its insulating value. It is important to keep the horse dry and sheltered from moisture. As expected, a horse with a thicker hair coat can retain more heat.

Research Update - Feeding Grain

This study, conducted at Texas A & M, compared a feeder with molded cups on the bottom (Pre-Vent feeder; http://pre-ventfeeders.com) with a commonly used rubber tub and hanging bucket feeder to determine differences in time spent eating and grain wastage.

Nine Quarter Horse geldings were fed a 12% crude protein pellet diet at 0.75% body weight twice daily from one of the three feeders for 3 days, and then switched to the next feeder.

The horses spent more time eating from the Pre-Vent feeders (31 minutes) than from bucket (19 minutes) and tub (19 minutes) feeders. When fed from Pre-Vent feeder, horses dropped significantly less feed (3%) of their ration than when fed from the bucket (10%) and tub (7%) feeders. When the most wasteful horse was fed from the Pre-Vent feeder, he lost a average of 9% of his grain, compared with 33% when fed from the bucket, and 26% when fed from the tub feeders.

The Pre-Vent design is useful for increasing time spent eating and reducing grain wastage.

Summarized by Krishona Martinson, PhD, University of Minnesota

By: Marcia Hathaway, PhD, Univ. of Minn.

Research Collaborators Needed

The U of M Equine Genetics and Genomics Laboratory is investigating the genetic basis of the mealy (or pangaré) coat color. Researchers are especially interested in Norwegian Fjords, Haflingers, donkeys, and Belgians.

Contact Dr. Jessica Petersen at jlpeters@umn.edu to participate in the study.

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Neurologic Disease in Horses: Part I

By: Carrie Finno, DVM, PhD, Univ. of Minn.

A healthy nervous system is essential for equine performance. This article is part 1 of a series discussing diseases of the nervous system of horses. Part I will focus on when you should have a veterinarian perform a detailed neurologic examination and will also discuss what a detailed examination involves. Part II will discuss diagnostic tests that can help to determine the cause of neurologic abnormalities, and Part III will review the available treatments.

When would you need a complete neurologic examination performed on your horse?
- Your horse has begun tripping or having problems going up and down hills
- Your horse has subtle performance problems that are not a clear lameness but appear to shift from leg to leg. This “mystery lameness” is often difficult, if not impossible, to localize and treat.
- Your horse has undergone an abrupt behavior change
- Your horse often stands in an abnormal position
- Your horse has lost muscle mass
- You have a young horse that you have started working with and noticed some gait abnormalities
- You have a young foal that appears uncoordinated or has difficulty turning his neck
- Your horse developed a droopy ear or his muzzle is pulled to one side
- Your horse suddenly began to carry his head tilted and leans or often circles
- You are having a veterinary examination prior to purchase
- Your horse is dripping urine or having trouble passing manure

If you or your veterinarian suspects that your horse has neurological disease, it is necessary to have a full neurologic examination performed. Neurologic disease can be difficult to sort out in the horse and it is important to have a veterinarian experienced in neurologic examinations examine your horse. Similar to physicians with specialization in neurology, there are board certified large animal internal medicine specialists at the University of Minnesota that specialize in neurologic disease. We begin asking, first, does a neurological problem exist? Second, what and where in the neurological system is the problem located? A detailed examination can provide answers to these questions.

What does a neurologic examination involve? Questions in a complete medical history often include:
- Age, sex and breed of horse. This is important as certain diseases are more common at a particular age or in a particular breed.
- Clinical signs. What have you noticed about your horse that you think is abnormal? When do these signs occur (at rest, when riding in the ring, only on trails, etc.)?
- Onset of clinical signs. Did you notice these signs suddenly or did they seem to develop over a long period of time?
- Progression of clinical signs. Have these signs worsened since you first noticed them or have they stayed the same? Did any treatments appear to improve them? Did you try resting your horse and, if so, did he improve?
- What type of riding do you do? How many days a week do you ride and for how long? Do you actively compete your horse?

Has your horse’s performance changed since you noticed the abnormalities?
- How long have you had your horse? Did you have a prepurchase examination performed prior to buying him?
- What did the previous owner use your horse for?
- Have any other horses at your barn appeared abnormal too? If so, are they housed together? Are they related?
- Does your horse have difficulty laying down or getting up? Can he urinate and pass manure normally?
- What vaccines has your horse received most recently? How often do you booster them?
- What deworming protocol do you use and when was the last time your horse was dewormed?
- What does your horse eat and where does he live?

It is often very useful if owners keep a journal of any changes noted in their horse’s behavior or gait. Digital videos showing the abnormal behavior are great to have, especially if the horse only does the behavior under certain conditions.

Sometimes, horses won’t show the abnormality when the veterinarian is examining them, either because they are more stressed than usual or in an unusual environment, such as a referral vet hospital. It can be very frustrating to go through all the trouble of scheduling an appointment only to have your horse not show the strange behavior or abnormal gait so taking the time to make a video is worthwhile.

Next month, we’ll discuss the neurological exam process.