

The Metabolic Problem

Domestication impacts our horses in a myriad of ways. As Applied Equine Podiatrists, we utilize the science of Applied Equine Podiatry to compensate for domestication's influence. There is a malady occurring due to domestication that is gaining recognition, especially seen in horses exhibiting laminitis/founder. This new malady has many names and is so complex that you will often hear the term "Equine Metabolic Syndrome" to cover them all.

Included under the umbrella of "Equine Metabolic Syndrome" (EMS) is Cushings Disease, Insulin Resistance, Hypothyroidism, etc. How these syndromes/diseases start in our horses, and in what causality, is under much scrutiny. Oftentimes many of these syndromes/diseases go together due to how the metabolic and hormonal processes interact in the horse. Diagnosis can be done by a veterinarian thru blood tests and observation of physical symptoms.

However, as horse-owners, we need to take responsibility to recognize the symptoms of EMS, and call the vet in before a crisis occurs. The symptoms of EMS are easy to identify, once you know what to look for:

Symptoms of Insulin Resistance:

- Easy weight gain
- Abnormal fat deposits such as a cresty neck or lumpy, cellulite-like fat at the tail base. These fat deposits will usually persist even if the horse loses weight elsewhere in his body
- Puffiness (fat) in the hollows above the eyes
- History of laminitis-commonly induced by grass
- Advanced symptoms include increased thirst and urination, loss of body condition, especially muscle, weakness, and low energy levels
- Compromised immune system

Symptoms of Hypothyroidism:

- Very non-specific and many overlap considerably with those of insulin resistance. Slow shedding/longer than normal coat may be seen. Energy levels poor, exercise tolerance poor. Horse may be irritable and sensitive to touch. Cannot be diagnosed with any certainty by symptoms alone, need to do blood tests.

Symptoms of Cushings Disease:

- Abnormal hair coat (longer than normal, often curly) that does not shed normally in the spring
- Mammary enlargement and/milk production in some mares
- Fatty sheath and or/heavy sheath secretions in some geldings
- Any or all of the symptoms listed for insulin resistance and/or hypothyroidism

Symptoms of Laminitis/Founder:

- Reluctance to turn (usually weighs one foot more heavily) and to move forward when led
- Lying down more than usual (when pain severe, stay down most of the time)
- Standing with front feet further out and rocked back on hind end (often called the founder stance)
- Feet feel warmer than usual
- Pulses in the arteries running over the sesamoid bones at the back of the ankle are strong and pounding

- Stretching or bruising of the white line
- Pain on sole pressure in front of the apex of the frog

If you feel your horse is exhibiting any of these symptoms, please contact your veterinarian immediately. Your veterinarian will be able to use a variety of diagnostic tools to verify or rule out any of the metabolic problems. Blood tests that may be done include: Insulin, Glucose, Full Thyroid (T3, T4), ACTH, Low Dexamethasone Suppression Test, and more.

Dietary changes, meticulous hoof care, and an accurate diagnosis are all critical to getting any horse on the road to recovery. Bottom line is, analyzing the horse's *entire environment* as KC teaches us. Practicing the science of Applied Equine Podiatry will keep you on the right road, resulting in a sound and happy horse.

Other resources available to horse owners and EPs:

www.equinepodiatry.net

www.safergrass.org

<http://groups.yahoo.com/group/EquineCushings/>

www.equi-analytical.com