



A. Cary Hills, DVM Whitney Brown, DVM Claire A. Smith, DVM
5065 NE Lincoln Rd, Poulsbo, WA 98370
(360) 779-5557 Fax (360) 779-3142
www.soundequinevet.com

Equine Cushing's Disease – Feed and Management Strategies

Equine Cushing's Disease, also known as Pituitary Pars Intermedia Dysfunction, is one of the most common endocrine disorders affecting the older horse and pony. Cushing's disease is a result of a non-cancerous (hyperplastic) tumor of the pituitary gland, located in the base of the brain. As the tumor grows, various hormones and neuropeptides are secreted at abnormal levels. The fluctuation in hormones and peptides causes systemic effects seen throughout the body such as poor or long hair coat, increased thirst and urination, episodes of laminitis or "founder" and hoof abscesses, muscle wasting, uneven distribution of fat, and immune suppression. Horses and ponies of all breeds and both sexes are affected by the disease. The average age of onset of clinical signs is 19, but has been reported in animals as young as 7.

Many horses and ponies with Equine Cushing's Disease can be successfully managed through fastidious husbandry and medication. Pergolide is the current medical therapy of choice. Pergolide is a compounded oral medication that suppresses certain peptides that are over-secreted in a Cushingoid animal. As a result, the major organ systems effected by the peptides are able to function more normally and the clinical signs of disease (poor hair coat, laminitis, etc) usually improve. In most circumstances, pergolide must be given once daily for the duration of the animal's life. The dose of pergolide is tailored to the degree of clinical disease and must be determined through a blood test. This test is performed by a veterinarian and analyzed at a special laboratory.

Horses affected with Equine Cushing's Disease should also be managed on a specific diet. Cushingoid horses should be fed a low-sugar, low-carbohydrate diet. This would include low-starch hays and complete feeds (such as Purina Mills L/S or LMF Low Structural Carbohydrate Feed). Soaking hay in water for 12 hours prior to feeding will also help to remove the starches from the fibers. High sugar feeds such as COB (corn-oats-barley), sweet feeds, feeds including molasses, and some treats should be avoided. Cushingoid horses should have limited to no access to pasture or grasses; grazing muzzles and mowing pastures can be helpful. If additional calories are required, they should be furnished through fat- and protein-rich sources, such as beet-pulp, rice bran, and corn oil or hydrogenated fats (like Cool Cal). Cushingoid animals should also be fed a balanced mineral supplement (such as Platinum Performance or Horse Guard). Changes in feed or diet should always be done gradually to avoid intestinal upset and colic.

Consistent and appropriate hoof care is another important factor when managing a Cushingoid horse or pony. Laminitis or "founder", and hoof abscesses occur with moderate frequency in horses affected by Equine Cushing's Disease. As such, it is important to maintain clean, healthy soles and frogs as well as address any discrepancies in toe-length or hoof wall thickness.