

Equine Cushing's Disease

Equine Cushing's disease is a disorder of the pituitary gland that results in hormonal imbalances, causing a variety of clinical signs:

- ⤴ a long, wavy hair coat that fails to shed according to normal seasonal patterns
- ⤴ excessive sweating; lethargy and poor athletic performance
- ⤴ **chronic recurrent laminitis**
- ⤴ infertility
- ⤴ weight loss, muscle wasting - especially along the top-line
- ⤴ abnormal distribution of fat with accumulations in the crest of the neck, tail head, sheath and above the eyes
- ⤴ consumption of large volumes of water and passage of large amounts of urine
- ⤴ delayed wound healing and increased susceptibility to infections



The disease tends to occur in middle-aged and geriatric horses, with an average age of approximately 20 years at the time of diagnosis. Without treatment, symptoms tend to worsen over time and many horses are euthanized as a consequence of laminitis, recurrent foot abscesses or complications related to bacterial infections.

What Causes Equine Cushing's Disease?

In horses, equine Cushing's disease is a syndrome associated with functional **adenomas**¹ or adenomatous hyperplasia of the pars intermedia of the pituitary gland, with excessive production and secretion of ACTH and other peptides.

Diagnosis of Equine Cushing's Disease

In advanced cases characterized by a long, wavy hair coat and other classical signs of Cushing's disease, diagnosis is relatively straightforward and may not require any specialized testing. Diagnosis of early cases or those characterized by few obvious clinical signs is considerably more difficult. The two most practical and accurate tests currently available are: (1) the dexamethasone suppression test and (2) measurement of plasma ACTH concentration.

Treatment of Equine Cushing's Disease

Optimal management of Cushing's disease involves a combination of both specific medication to normalize the function of the pituitary gland and supportive care to address and prevent complications associated with the disease. **In both cases, management will be life-long as there is no way to reverse the disease process.** In the early stages, specific medication may not be required and conservative measures such as body clipping to remove the long hair coat, strict attention to diet and scrupulous attention to teeth, hooves and preventative care may be sufficient to provide good quality of life.

Since affected horses are often insulin resistant, sweet feed and other feedstuffs high in soluble carbohydrates should be avoided in favor of diets emphasizing fiber and fat. Pelleted or extruded feeds designed specifically for older horses are strongly recommended, but those with high levels of sugar or molasses should be avoided unless needed to encourage the horse to eat.

The current medication of choice is currently pergolide mesylate (Permax®), which is administered daily by the oral route.

Fall is here, cold is near. Remember to provide fresh water, shelter and plenty of hay to fuel your horses' winter fire.



Oakwood Veterinary Service, Colona, IL 61241

(877) 949-2144 (toll free)

Visit our website: www.oakwoodvets.com

¹ adenoma: a benign epithelial tumor

