

CUSHING'S SYNDROME

By Janye D. Wilson - *Cushing's Disease in Horses*

Symptoms • Health Management • Feeding

Equine Cushing's Syndrome, also known as PPID - Pars Pituitary Intermedia Dysfunction, is a disorder of the endocrine system (organs that are involved in the release of hormones). Cushing's Syndrome most commonly affects pony breeds, but larger breeds can also be affected. It is often thought that only older horses are afflicted by Cushing's Syndrome, but it has been known to occur in horses as young as 7 years old.

Cushing's Syndrome is caused by a tumor of the pituitary gland, which is the small gland at the base of the brain and is an important endocrine organ that produces a variety of different hormones. The abnormal hair coat can vary from delayed shedding of the winter coat to the development of a long, thick and wavy overgrown coat. This coat characteristic is known as "hirsutism" and is due to the enlarged tumor as it grows and puts pressure on the nearby hypothalamus, a section of the brain located next to the pituitary gland that regulates body temperature, appetite and seasonal shedding of hair.

Symptoms of Cushing's Syndrome:

- Horses with Cushing's Syndrome can easily be recognized by their coarse, wavy coat that often fails to shed in the summer. This may be accompanied by sweating and seborrhea (a flaky, scaly disease of the skin).
- An affected horse may drink as much as 80 liters of water a day (as opposed to an average of 20-30 liters). This condition is usually accompanied by polyuria, excessive urination.
- Development of a swayback stance and a pot belly.
- Filling above the eyes caused by the deposition of fat.
- A general condition of general bodily weakness or discomfort, with dull eyes and a drab coat.
- Increased appetite, usually with no sign of weight gain.
- Chronic laminitis.
- Loss of muscle over the topline.
- Compromised immune system which gives rise to a host of conditions/diseases which are often passed off as old age

In order to confirm a diagnosis of Cushing's disease, specific hormone tests are normally done. Blood and urine tests are done and repeat testing may be necessary, as preliminary tests do not always produce conclusive results. Some cases can be so obvious, that treatment is prescribed in advance of testing. When symptoms are caught early, treatment can be extremely successful, returning the horse to normal health for many more years.

Helping the horse with Cushing's Syndrome: It will be the owner's role to focus on careful health management and preventive treatment.

- Avoid stressing the horse. The hormonal profile of many horses with Cushing's Syndrome already indicates high stress levels, so reducing stress is critical.
- Providing a safe comfortable stall for the horse.
- Sticking to a strict routine, which will help minimize stress.



- Keeping water and feed conveniently located and in the same place.
- Clipping the horse in warm weather and using blankets when it is cold.
- Keeping up grooming to minimize skin disease.
- Keep hooves in good shape.
- Having teeth checked by a professional twice a year.
- Avoid turning the horse out with aggressive horses.
- Deworming regularly.

FEEDING A HORSE WITH CUSHING'S SYNDROME

By Gayle M. Reveron, PAS

As the number of horses known to have Cushing's Syndrome increases, questions on how to feed horses with this condition also increase. As a starting management practice, your veterinarian may recommend pergolide as an added medication for your horse. This is available from a number of pharmaceutical sources by prescription.

When it comes to feeding them, though, here are a few tips that may help make life a little easier:

- If your Cushing's horse has some joint problems, you may want to also consider using one of the chondroitin sulfate + glucosamine products that are available in supplement form.
- Cushing's syndrome horses require a hay or pasture source that is low in non-structural carbohydrates (NSC), so you might want to have your forage tested.
- They do well on senior feeds that are fortified with lysine, methionine, biotin, vitamin E and organic trace minerals (copper, zinc, manganese and selenium) to help maintain muscle mass, support hoof growth and support immune response.
- Feeding directions need to be followed to make certain enough senior feed is being fed as these older horses may not be able to utilize forage very efficiently.
- If your horse is not maintaining weight, you may need to increase the feeding rate of the senior feed or add a low starch, rice bran based high fat supplement.

Most senior horses with Cushing's Syndrome do very well on a senior feed and appropriate medication. Cost of pergolide can vary greatly and your veterinarian may be able to direct you to the best source.

