

Cushing's Disease PPID (Pituitary Pars Intermedia Dysfunction)

What is it?

Equine Cushing's disease is caused by dysfunction of a small area of the brain called the pituitary gland. This results in hormonal imbalances in the blood. One of the main hormones altered is the body's own steroid –cortisol. This is greatly elevated in a Cushingoid animal and accounts for some of the changes to the animal's appearance. It can occur in any breed, age or sex of horse although it tends to affect ponies more commonly than horses. This disease tends to affect older animals with many showing signs from about

15 years onwards. The medical term for Cushing's is PPID (pituitary pars intermedia dysfunction).

What does it look like?

- **Hirsutism** – Ponies with Cushing's tend to have a characteristically long curly hairy coat, even in the summer months. Often the first signs may be that your pony will not lose their winter coat as quickly as his other horse friends and may still retain patches of longer hair as the months get warmer.
- **General Appearance** – The general shape of the pony changes with this disease. Typically, fat will accumulate in areas such as the neck, around the top of the tail, and above the eye, but will be lost over the back and ribs. Your pony may develop a pot-bellied appearance, even though you may be able to feel his ribs.

Other signs to look for:

- **Laminitis** – One of the most common and most serious consequences of the condition is laminitis. A large proportion of Cushing's cases have recurrent mild (sometimes more severe and even extreme) laminitis.
- **Increased thirst and urination** – Filling water buckets more often and having to muck out a wetter stable are signs that your pony is drinking more and can be a side effect of the increase in the blood steroid
- **Lethargy** – lack of get up and go. These horses/ponies often appear much older than they actually are.



- **Excessive sweating** – this can be a direct consequence of having a thick coat in the summer but may also be due to the physical effects of having an enlarged pituitary gland pressing on the areas of the brain that control temperature regulation.
- Delayed healing of wounds, even minor injuries take weeks to repair.
- Chronic infections as a result of the body's own defence mechanisms being dampened down by the increased cortisol. These may include recurrent eye ulcers and foot abscesses.
- In some cases, and more commonly in horses rather than ponies, Cushing's can present with
- difficulty in gaining maintaining weight/ condition.

How to diagnose?

- **Clinical signs** – The appearance and history of an animal suspected of having Cushing's may be enough to convince the vet but further tests are available for a definitive diagnosis.
- **Blood tests** – Diagnostic tests have improved dramatically in recent years as our understanding of disease has improved. Please call to discuss what test is best for your horse to perform however there are more specific tests which can be done but may require sending to an external laboratory.
- Urine analysis will also show the presence of glucose.

How to treat?

There are drugs available which suppress the production of excess hormones and will help to improve the physical appearance and quality of life of the Cushing's sufferer. However, in addition to this close attention to foot care, worming and dental condition is needed to maintain the health of the pony. Regular clipping and then appropriate rugging up will help to stop overheating in the summer months.

Will my pony recover?

There is no cure for Cushing's disease but with medical management and good husbandry, clinical signs can be well controlled, often for many years.

