



Equine Cushing's syndrome

What is Cushing's disease?

Equine Cushing's disease is a condition, generally in middle aged to older horses (>15 years old). Younger horses can also be affected. It is a syndrome caused by hormone-related problems, due to degenerative changes in the brain. The pituitary gland, at the base of the brain, plays a major role in hormone production- when this enlarges, it results in increased release of several hormones. The main hormone changes lead to an increased production of cortisol (steroid), by the adrenal glands, which lie above the kidneys. The over-production of cortisol leads to most of the clinical signs associated with Cushing's disease.

It is also known as PPID (pars pituitary intermedia adenoma), ECD and hyperadrenocorticism. Equine Cushing's disease is very different from Cushing's disease in cats, dogs or man.

What are the signs of Cushing's disease?

Clinical signs of Cushing's disease vary, but include:

- **Laminitis**- common and serious, may be mild and chronic (long-term) with no obvious cause
- A long, curly coat (hirsutism)
- Variation in normal coat shedding- often delayed to later in the year
- Excessive sweating
- Excessive drinking and urination
- Increased susceptibility to infections, such as skin infections, foot abscesses and sinus/dental infections
- Abnormal body shape- many horses lose muscle, yet fat redistribution may give them a "pot-belly" appearance
- Bulging of the hollow above the eyes
- Lethargy/ dull
- Blindness and seizures can occur in extreme cases if the pituitary gland pushes on other parts of the brain, but this is very rare

How is Cushing's disease diagnosed?

- In most cases, a simple one-off blood sample will let us know if your horse has Cushing's disease- "Merial" (a drug company) regularly sponsor free testing so please ask at reception if free-testing is available
- Often, we suspect it due to clinical appearance of your horse or pony

How can Cushing's disease be managed?

- If laminitis is a problem, immediate medical care is needed- pain relief, foot care etc.
- General nursing and care is always required
- Clipping, often year-round, with appropriate rugging will help keep your horse comfortable and dry
- Regular dental checks, vaccinations, worming and faecal egg counts are essential
- Routine farriery will help minimise foot problems and allow signs of laminitis to be closely monitored
- Good quality feeding and routine weight checks will help maintain weight and provide essential nutrients
- Medication may also be used



Is there medication for Cushing's disease?

- Yes, medication will often improve your horse's quality of life
- Medication, generally with a drug called "Prasceid" (pergolide) can be given by mouth once daily
- Medication must be used alongside management changes
- Once you start medication, it should be administered life-long
- Regular blood tests will allow monitoring of the disease and the dose of medication to be changed accordingly
- Medication will not "cure" the disease, but will often lead to a large improvement in the changes you have noticed and lead to an overall improvement in quality of life

Prasceid tablets

- When we start a horse on medication we often start on a "middle of the road" dose
- Regular blood sampling (initially every 4-6 weeks) then allows us to assess the effect of treatment and adjust the dose accordingly
- Tablets should not be crushed, but instead administered dissolved in a small amount of water in a syringe and administered by mouth. A small amount of molasses/ honey or yoghurt can be added to the syringe to aid administration
- Clinical improvement is expected within 6-12 weeks of starting treatment