

PPID (Equine Cushings Disease)

WHAT IS PPID?

Pituitary Pars Intermedia Dysfunction (PPID or Cushing's Disease) is a common hormonal disorder in horses and ponies over 15 years old. It occurs due to reduced dopamine inhibition and benign tumor growth in the pituitary gland's pars intermedia, leading to excessive production of POMC and related hormones such as ACTH.



SIGNS AND SYMPTOMS

Symptoms include abnormal hair growth, sweating, laminitis, increased thirst and urination, muscle loss, lethargy, recurrent infections, unusual fat deposits, and sometimes neurological issues.

DIAGNOSIS

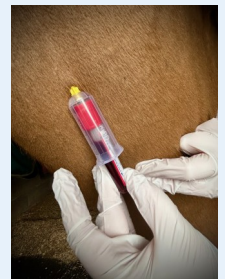
To diagnose PPID, a basal plasma ACTH blood test is used, measuring adrenocorticotrophin (ACTH) levels. This test is reasonably sensitive and specific, making it the current standard for diagnosis.

Basal plasma ACTH levels can be affected by seasonal changes in pituitary secretion, so reference values vary:

0–47 pg/ml from August to October, and 0–29 pg/ml from November to July

If results are borderline, a thyrotropin releasing hormone (TRH) stimulation test may be performed. This involves collecting a plasma sample for ACTH, administering 1 mg TRH intravenously, and then taking another sample 30 minutes later. PPID is suggested if baseline ACTH exceeds the seasonal reference or post-stimulation ACTH is over 100 pg/ml.

Additionally, elevated plasma insulin levels may indicate insulin resistance and hyperinsulinaemia in affected horses, which could help predict the risk of developing laminitis. These samples can often be taken at the same time.



TREATMENT & MANAGEMENT

- Medication**
 - Cushings disease can be treated with a medication called pergolide. This is available in a tablet (or paste) form and should typically be given to the horse orally, daily.
 - Repeat examination and blood sampling should be performed in around 4 weeks after treatment commences to assess response to treatment, and then every 6 months to ensure that adequate treatment continues once the horse is stable.
- Management**
 - Alongside pergolide tablets, horses with PPID need regular preventative health care, including vaccinations and dental treatment, due to their increased risk of infections due to lower immune function.
 - Clipping may be needed in warmer months if your horse struggles to shed their coat as sweating can also be increased.
 - Use rugs if the weather turns chilly. Temperature control can be erratic / altered in PPID horses.
 - Keep a healthy fat score to help reduce the risk of laminitis.



PREVENTION

PPID is an impossible disease to prevent developing. The key is ensuring you know your horse, identify any changes no matter how subtle and discuss these with your vet to allow early intervention and detection where possible.