

Pool House Equine Newsletter



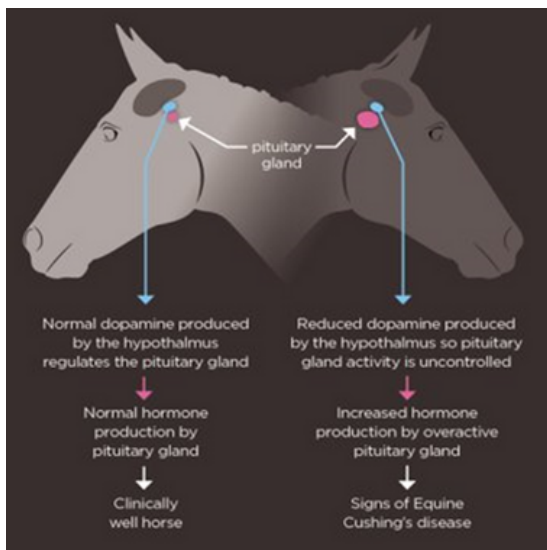
Pool House Equine Hospital

Equine Cushing's Disease

What is Cushing's Disease, and could my horse have it?

Equine Cushing's Disease (also known as Pituitary Pars Intermedia Dysfunction or PPID) is one of the most common medical conditions to affect horses and ponies in the UK1. It is a progressive disease that affects older horses, mainly those over ten years. It is estimated that 1 in 5 horses over the age of 15 years suffer from the disease.

In Cushing's, the pituitary gland in the brain becomes overactive and enlarged. It overproduces a variety of hormones into the blood stream that impact around the body and cause the clinical signs that we see associated with Cushing's. Adrenocorticotropic hormone (ACTH) is the main hormone that has been correlated with the signs that we see in horses with Cushing's.



Cushing's can affect any older horse or pony, of any breed or gender. The main risk factor for developing Cushing's is increasing age. Whilst nothing can be done to prevent horses from developing it, owners with horses over the age of 10 years should remain vigilant of the clinical signs to ensure that they raise any concerns with their vet early. Once diagnosed and treated symptoms will improve and horses are likely to experience a better quality of life.

The disease develops gradually, so it is easy to miss the early signs, which can be subtle and varied. Many of the clinical signs of Cushing's are often not noticed by owners as they are attributed to normal ageing⁴. Horses with Cushing's can show hair coat changes (long, curly coat and delayed shedding of winter coat), lethargy (often perceived as 'slowing down'), muscle wastage, changes in fat distribution (fat pads above the eyes, crest), patchy sweating, recurrent infections, increased drinking and urination, reduced fertility and even laminitis.

Horses with Cushing's are five times more likely to develop laminitis however, not all horses with Cushing's will get it. If your horse develops laminitis, your vet may recommend assessing body condition and testing insulin levels to determine whether Equine Metabolic Syndrome (EMS) is present and, if they are over 10 years old, also testing for Cushing's. It's important to test laminitic horses over the age of 10 for both EMS and Cushing's as these are the two diseases associated with the risk of endocrinopathic (hormonally-associated) laminitis, which accounts for 90% of laminitis cases.



Your vet may be suspicious of Cushing's based on your horse's history, age, type and number of clinical signs present. We can confirm whether the disease is present or not with a simple blood test to check the levels of ACTH in your horse's bloodstream. As we participate in the nationwide Care About Cushing's testing scheme you will be entitled to a free* diagnostic blood test as long as they haven't already had a test in the last twelve months. If a horse tests negative or in the equivocal zone, whilst this may mean your horse does not have the disease, it can also mean that the test was simply carried out early in the disease progression. If your horse is still showing sign of Cushing's disease, it may be advisable to carry out a re-test 6-12 months later, ideally in the autumn months when the test may be more accurate.

We recommend visiting www.careaboutcushings.co.uk/how-to-spot-it (QR code below), where you can download a checklist which can help you promptly identify if your horse might have Cushing's. You can also find more information on how Cushing's can affect your horse and access further information to optimise your horse's management and quality of life. If you're concerned your horse may have Cushing's, give the practice a call to book a visit, where a vet can discuss your concerns and perform a diagnostic blood test if appropriate.

*Free laboratory ACTH test fees only.
Visit, blood sampling or interpretation fees may apply.



References:

1. Blue Cross (2018) National Equine Health Survey (NEHS) available at NEHS-results-2018.pdf (bluecross.org.uk)
2. McGowan TW, et al. (2013) Prevalence, risk factors and clinical signs predictive for equine pituitary pars intermedia dysfunction in aged horses. *Equine Vet Journal*. 2013;45(1):74-79.
3. Ireland, Joanne L., and Catherine M. McGowan. "Epidemiology of pituitary pars intermedia dysfunction: a systematic literature review of clinical presentation, disease prevalence and risk factors." *The Veterinary Journal* 235 (2018): 22-33.
4. Ireland J, et al. (2012) Comparison of owner reported health problems with veterinary assessment of geriatric horses in the UK. *Equine Vet Journal* Jan;44(1):94-1005
5. Menzies-Gow, Nicola J., Heidi E. Banse, Aimi Duff, Nicholas Hart, Joanne L. Ireland, Edward J. Knowles, Dianne McFarlane, and David Rendle. "BEVA primary care clinical guidelines: Diagnosis and management of equine pituitary pars intermedia dysfunction." *Equine Veterinary Journal* 56, no. 2 (2024): 220-242.
6. Karikoski NJ et al. (2011) The prevalence of endocrinopathic laminitis among horses presented for laminitis at a first-opinion/referral equine hospital *Domestic Animal Endocrinology* 41. 111-117.

