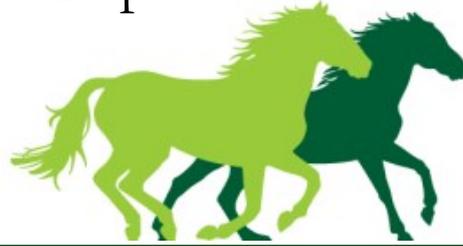


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ARTICLE - ENDOCRINE DISEASES AND LAMINITIS

Laminitis remains a crippling and difficult disease to treat and control. However, vast amounts of research are coming out all the time so we strive at all times to keep our knowledge as up to date as possible.

We now understand that around 90% of cases of laminitis are due to an underlying endocrine disease and that rapid diagnosis and control of these underlying diseases can improve a horses' chances of having a good outcome. The endocrine diseases that often contribute to laminitis risk are **Equine Cushing's Disease (PPID)** and **Equine Metabolic Syndrome (EMS)**.



Testing for PPID

We recognise the most common signs of PPID are laminitis, abnormal hair growth, fat around the eyes and muscle wastage. Although we have commonly thought of it as a disease of older horses more than 40% of horses in the 10-15 year age bracket with at least one of these clinical signs will test positive for PPID. In cases with laminitis that are 10 years or older we would recommend testing for PPID.

Our initial screening is a single blood test testing for a hormone called ACTH. This hormone is closely correlated with a diagnosis of PPID and remains our number one test for PPID.

We do have some cases that come back as borderline and our options in these cases are to:

Resample in September/October time when the ACTH test is most sensitive (ACTH has a seasonal variation).

TRH Stimulation Test – is a more sensitive test for PPID. It involves taking a blood sample, then injecting a hormone (TRH) intravenously and taking a second blood sample 10 minutes later.



Testing for EMS

Equine Metabolic Syndrome is a syndrome which is characterised by being overweight or having abnormal fat distribution, insulin resistance and laminitis. It occurs as a result of genetic and environmental factors.

Historically, we have felt that a stimulation test involving feeding your horse glucose powder is one of the best ways of diagnosing and monitoring the progression of EMS. However, we found that some horses (much as it is surprising!) are reluctant to eat glucose powder so a new test has evolved using **Karo Light Syrup** which is much more palatable. New evidence suggests that stimulation tests remain the best way of monitoring for high blood insulin which is an important trigger in the development of laminitis.

A new single blood test has also come on the market which is called **Adiponectin**. This can be useful in horses in which the stimulation tests are not possible or appropriate. It can be a useful indicator that a horse may be susceptible to EMS although it is less useful as a monitoring tool.

