



# Vet's Casebook



Brought to you in association with Frame, Swift and Partners

## Cushing's doesn't have to mean retirement for our elderly equines

**Sam Galloway**, of Frame, Swift and Partners, describes the symptoms of this 'old age' disease and looks at how life can be made more comfortable for the sufferers

**A**t a recent endurance riding event I checked a pony that had completed the ride and was hardly out of breath. I thought there was nothing remarkable about this until I found out the pony was almost 30 years old.

As standards of feed, farriery, medicine and dentistry improve, more and more of our patients are living longer and staying fitter to a more advanced age. While this is good news, it does mean that we are seeing an increase in the number of 'old age' diseases being diagnosed.

One of the more common diseases that some would place in this category is Cushing's syndrome. In fact, Cushing's can be seen from the early teenage years, but is most commonly diagnosed in horses and ponies in late teens or older.

It is probably considerably under-diagnosed and a large proportion of aged equines will have some degree of Cushing's syndrome.

In horses and ponies it is caused by a benign growth in the pituitary gland in the base of the brain. This leads to over-production of a hormone that stimulates the adrenal gland to produce an excessive amount of cortisol. It is the increase in cortisol that leads to the characteristic signs of Cushing's syndrome.

The most common sign is a very thick, curly coat of hair that is often not shed during the summer. The fat pad above the eyes may become enlarged leading to a slightly doxy expression, although I find that this is only seen in a few cases.

Cortisol tends to increase the thirst levels so affected animals will drink – and therefore urinate – more than usual. A constantly



**Symptom:** The typical curly hair coat seen in a pony with Cushing's syndrome

### 'There are ways to test for Cushing's syndrome, none of which is without drawbacks'

empty water bucket or bedding that is quickly soaked may be an early warning sign.

Laminitis is also a frequent problem. High levels of cortisol also affect the immune system so sufferers are prone to recurrent infection such as tooth abscesses and wounds may take longer than usual to heal.

There are several ways to test

for Cushing's syndrome, none of which is completely without drawbacks. Two blood samples, taken just before and 19 hours after an injection of steroid give an accurate diagnosis.

The problem is that steroids can potentially cause laminitis, so in a pony already prone to laminitis giving more steroids is not without risk.

Measuring the hormone produced by the pituitary gland (ACTH) is another way of checking for Cushing's. This avoids the need for steroid injections but the sample has to be frozen as soon as possible after sampling and then sent to the laboratory on ice, which has some practical difficulties.

Another useful way of diagnosing it is simply on clinical signs – a pony of 20-something years old that has a thick curly coat, drinks a lot and has laminitis is pretty likely to be suffering from Cushing's.

Many horses and ponies with Cushing's can be made a great deal more comfortable without drug treatment. Taking basic mea-



**Painful:** An x-ray of a pony with Cushing's Syndrome suffering from chronic laminitis

asures such as clipping the coat in summer to keep them cool, regular dental checks to watch for signs of abscesses and keeping in regular contact with your farrier to minimise the effects of laminitis can drastically reduce the impact the disease has on quality of life.

For more severe or refractory cases medical treatment is sometimes needed.

Until recently there were no drugs licensed for its treatment, but in the last month a product containing pergolide has been granted a licence for use in equines.

There is often a considerable improvement in clinical signs once treatment is under way, particularly in those patients prone to laminitis.

Although we are never going to be able to completely halt the inevitable ageing process, there's no need to expect to have to turn our horses and ponies out to a leisurely retirement by the time they are entering their 20s.

Being aware of the signs of 'old age' diseases should allow earlier detection and treatment. Perhaps in the future vetting a 30-year-old pony at an endurance event will no longer be a cause for surprise!