

## Cushings Case Study

Tinker", 19 year old grey Welsh Cob x Arab mare

A call came into the practice, from Tinker's owner, Mrs. Jones, reporting that Tinker's coat had started to become curly, wavy and unsightly! As well as this, Mrs. Jones had noticed Tinker had a nasty, crusty, pussy wound on the underside of her belly. Tinker had also been having intermittent episodes of patchy sweating, although in herself Tinker seemed perfectly happy. After examining Tinker, the vet found all her major parameters such as her temperature, heart rate and her respiratory rate to be normal. Due to her age and clinical signs a diagnosis of Cushing's was made. Mrs. Jones wanted to know whether a blood test could be performed to confirm the diagnosis, or indeed how all her symptoms were related. This is the explanation Mrs. Jones was given

" A number of glands in Tinkers body control the hormones that are released into her blood. One of these glands, the pituitary gland, starts to function abnormally, i.e. it starts to secrete too much hormone. This hormone is called cortisol, and is also as the stress hormone. When there is too much cortisol, your immune system is suppressed, how many times do you end up getting cold sores, when you are worrying about something such as sitting your driving test, or doing exams? This is why; Tinker has got a long term skin infection, because her immune system is being depressed by the cortisol. The pituitary gland itself is situated in the brain. Near the hypothalamus. The hypothalamus controls our body temperature. So as an effect, Tinkers curly, thick. Winter coat which she is shedding, and patchy sweating, all indicate that her hypothalamus, which is closely related to the pituitary gland, is not functioning normally

There are many signs which ponies with Cushing's will show, such as laminitis, weight loss, muscle wasting, increase drinking and urinating. All these signs are related to the high volume of cortisol whizzing around her blood stream. There are many blood tests that we can do, to try and confirm our diagnosis, but none of them are particularly accurate, so we at Equine Centre feel that the best way to make the diagnosis is on the presenting clinical signs that we have in front of us."

Mrs. Jones now wanted to know what the treatment options were for Tinker.

" The most reliable and proven drug that we use is Pergolide, which acts to negatively inhibit the release of cortisol from its gland. The clinical signs listed above will normally improve within 6 weeks. There are other drugs which we could use, but we find Pergolide to be the most effective"

Tinker is currently receiving her 1 tablet in the morning so that the drug can inhibit the natural daily pattern of cortisol and Mrs. Jones reports that she is happy with Tinkers progress.

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