

CUSHINGS

Cushings or PPID (Pituitary Pars Intermedia Dysfunction) is a common neurodegenerative endocrine (hormonal) disease that typically affects 20% of aged horses, ponies and donkeys.

The pituitary gland, which is in the base of the brain, is responsible for controlling release of certain hormones, including ACTH. Even though it is not fully understood, as some horses age there is a gradual enlargement of the gland which may be due to degenerative changes. When ACTH production is increased, there are a variety of clinical signs that develop, compatible with Cushings.



CLINICAL SIGNS

Horse and ponies suffering from PPID may display one or more of the number of symptoms:

- Long and curly coat that fails to shed fully;
- A 'pot-bellied appearance', usually a result of muscle loss over the top line and abnormal fat distribution (above eyes, crest, and above tail head);
- Lethargy/dullness
- Excessive sweating;
- Increased water intake, so often thirsty and as a result, urinate more frequently;
- More susceptible to infections, such as for example, foot abscesses;
- Prone to laminitis or become at risk before the above symptoms present themselves.

DIAGNOSIS

A presumptive diagnosis can be done based on the horse clinical presentation. However, a definitive diagnosis is achieved by doing a blood test that checks the concentration of ACTH. If this value is above the normal limits according to the time of the year and the clinical presentation follows, the horse has Cushings. However, in some cases the result comes within a 'grey area' and in that case a second line test, called TRH stimulation test can be performed to clarify the diagnosis.

TREATMENT

Cushings is treated with medication alongside a good management plan.

Pergolide is the drug used to control the production and release of ACTH, thereby improving clinical presentation. This medication does not cure the disease and needs to be given on an ongoing basis for life. The majority of horses are kept on 1 tablet a day, however adjustments may need to be done depending on each case and therefore blood tests are recommended on a regular basis.



DIET MANAGEMENT

The overriding factor when managing diets for equines suffering from PPID is the increased risk of laminitis due to the hormone imbalances. Whilst this may be reduced for those being managed with pergolide, it should always be considered whether you are trying to promote weight gain/maintain condition or encourage weight loss/avoid weight gain. Decisions about the diet may also be dependent on whether the horse or pony has suffered from laminitis in the past.

In order to help control sugar intake, forage (hay/haylage) should ideally have a water-soluble carbohydrate (wsc) content of below 10% yet this can only be confirmed by having it scientifically analysed. As a rule, later cut, coarser hay/haylage is generally lower in wsc. Soaking hay/haylage for 12 to 16 hours will help to reduce the wsc content. Build up to this gradually as soaking can reduce palatability and be careful in warm weather to avoid fermentation or bacterial growth.

Providing these precautions have been taken, forage may be fed ad lib to provide fibre calories and support gut health. As later cut forages tend to be less nutritious, Alfalfa Plus Oil and/or Fibre-Beet can be fed as additional sources of highly digestible fibre as well as some quality protein and other nutrients.

Time at grass will need to be carefully managed to control sugar intake. Turning out very late at night, when grass sugar levels are lowest and ensuring they are brought in by mid-morning is safest. Avoid turning out onto pastures during cold conditions, such as frosty mornings, when the sugar levels increase.