

Cushing's Disease in Dogs

Introduction

Cushing's Disease, also called Hyperadrenocorticism, is a common hormonal disease in dogs. It is usually seen in middle aged to older animals and can occur in any breed - however poodles, dachshunds, beagles and boxers appear to be more at risk.

Causes

About 85% of Cushing's cases are due to a tiny tumour in the hormone-regulating centre of the brain. This tumour releases a signal that stimulates both adrenal glands (one situated above each kidney) to enlarge and release large amounts of cortisol (steroid) into the body.

The other 15% of cases are from tumours on the adrenal gland itself, which also stimulates the production of large amounts of cortisol (steroid). Essentially, tumours are found in either location, but **both** cause **excessive cortisol (steroid) secretion** in the body.

Cushing's signs can also be seen in pets being treated with very high doses of cortisone tablets or steroid injections over a long period of time.

The end result of these three causes is a high level of circulating cortisol which will have an influence on every cell in the animal's body leading to the following symptoms.

Symptoms

Affected animals will develop signs of the disease over a few weeks or months. Initially you may notice a marked increase in thirst, appetite and urine volume. This can mimic the signs seen with diabetes and these two diseases can actually occur together!

As the illness progresses he or she will start to lose hair – especially over the flanks, the skin will thin, muscle wastage sets in and the liver will enlarge to give a pot-bellied appearance. At this point they will tire easily and often pant excessively.

Diagnosis

Cushing's is relatively easy to diagnose from both blood and urine tests. Hormone stimulation or suppression tests are usually diagnostic. Enlarged adrenals can also be seen on ultrasound.

Treatment

Treatment of Cushing's is by medications, and include:

Trilostane: This reversibly inhibits cortisone production by the adrenals. It is safe and usually well tolerated. It can be costly in high doses, but has few side effects.

Lysodren: This 'shrinks' the enlarged glands. Initially it is given daily until the dog is stable (usually 7 days) and then once weekly after that. The drug is toxic and as such is rarely used anymore. Most dogs get side effects to the drug as their system takes time to get used to it. Symptoms include lethargy, vomiting and diarrhoea. It can also completely destroy the adrenals and give rise to Addison's Disease (the opposite of Cushing's Disease).

Prognosis

The prognosis for animals receiving treatment is quite good. However untreated animals have a very poor prognosis and shortened life span.

Owners should see the clinical signs reversing with appropriate therapy - thirst and appetite return to normal, fur grows back and energy levels increase as their muscles regenerate. Ideally dogs are monitored with check ups and blood tests to keep the disease under control.



This is by no means a comprehensive information sheet. Please don't hesitate to contact your veterinarian for more information.

