

Cushing's Disease (Pituitary Dependent Hypercortisolism)

What is it?

Cushing's is caused by a pituitary tumor (usually non-cancerous) that triggers excess level of the stress hormone cortisol. The pituitary produces adrenocorticotropic hormone, or ACTH, which stimulates the adrenal glands near the kidneys to produce cortisol. A small percentage of dogs with Cushing's disease have a tumor of one of the adrenal glands which may or may not be cancerous. This form is called adrenal dependent Cushing's and results from a direct increase in cortisol production by the adrenal gland tumor. Cushing disease in dogs generally affects middle-aged dogs to older animals, but can affect any age.



What causes it?

The most common cause of Cushing's is a benign pituitary tumor. When Cushing's develops as a result of problems within the pituitary gland, the condition is called pituitary dependent hyperadrenocorticism (PHD), which is responsible for 80 – 85% of Cushing's cases. Tumors within the adrenal gland (adrenal dependent hyperadrenocorticism or ADH) are responsible for the other 15 to 20% of Cushing's disease. Long term usage of corticosteroids can predispose a dog to developing Cushing's.

Signs & Symptoms

Some of the common signs of Cushing's are hair loss, pot-bellied appearance, increased appetite, increased drinking and urination. They may also show lack of energy, muscle weakness, thin skin, bruising and increased panting.

Testing & Treatment

How is it diagnosed?

There is no single test to diagnose Cushing's disease. History, physical exam, blood and urine tests often indicate a suspicion for the presence of Cushing's. Some of the specific tests for Cushing's disease include urine, cortisol/creatinine ratio, low dose dexamethasone suppression test, high dose dexamethasone suppression test and an ACTH stimulation test. Dogs with Cushing's may be more likely to get bacterial infections, particularly bladder infections.

How is it treated?

Lifelong oral medication is often prescribed for pituitary dependent Cushing's disease. The most common drugs used are trilostane and mitotane (Lysodren). Radiation may be used to shrink the size of a pituitary tumor, and most effective on small tumors resulting from pituitary dependent Cushing's. Surgery and Transsphenoidal surgery are additional options to remove the tumor.

Prognosis:

Prognosis with treatment of pituitary dependent Cushing's is generally good. Roughly 85-95% of dogs with pituitary dependent Cushing's who have the tumor removed have hormonal remission. Dogs with adrenal tumor surgery can be potentially cured.

This information is not meant to be a substitute for veterinary care.

Always follow the instructions provided by your veterinarian.

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