



CUSHING'S DISEASES (Hyperadrenocorticism) IN DOGS

Cushing's disease is a relatively common disorder of middle-aged to older dogs. Understanding its signs, diagnosis and treatment is aided by understanding the adrenal gland's function. Normally, the release of a specific hormone, called ACTH, by the pituitary gland of the brain stimulates the adrenal gland to produce the cortisones needed by the body. The presence of these cortisones in turn causes the brain to slow the release of ACTH. This negative feedback system helps the body control cortisone levels, keeping them within a narrow range.

In Cushing's disease this feedback system is unbalanced. Tumors of the adrenal gland lead to unchecked cortisone production even when no ACTH is present. The PDH form of Cushing's disease is marked by overproduction of ACTH by the pituitary gland (ignoring the cortisone's negative feedback) leading to continued over-stimulation of the adrenal gland. In either case, the result is overproduction of cortisones affecting multiple body organs and systems.

Signs of Cushing's disease are variable and include recurrent skin infections, increased water intake, increased amount and frequency of urination, a pot bellied appearance, hair loss and/or failure of hair regrowth after grooming, increases in appetite, behavior changes, vomiting, and nervous system signs. While increases in appetite, thirst and/or urination are the most commonly seen signs, any combination of signs may be present. If untreated, Cushing's disease signs may progress, leading to secondary problems including diabetes, weakness or death.

A series of blood tests may be required to diagnose Cushing's disease. We become suspicious when specific abnormalities are present on a standard blood profile of a dog with some of the above-mentioned clinical signs. A low dose dexamethasone suppression (LDDS) test, which requires 3 blood samples to be obtained over an 8-hour period, often will determine whether Cushing's disease is present. While this test may be able to distinguish between the PDH and the adrenal tumor forms of the disease, sometimes an additional test is needed to tell which form of the disease is present. Eighty-five percent of dogs that have Cushing's disease have the PDH form of the disease.

Once it has been determined which form of Cushing's disease is affecting your pet we can consider treatment plans. Generally speaking, the PDH form is treated medically while adrenal tumors are treated surgically. Specific treatment options and protocols will be discussed with you and individually tailored to your pet, however, successful treatment relies on your diligence in monitoring, caring for and medicating your dog in addition to the need for periodic retesting to ensure the disease is controlled.

While the most common form of Cushing's disease is not curable, most dogs can continue to lead happy, productive lives once stabilized on medication. Please do not hesitate to contact the office if you have any questions.