

Addison's Disease

*Also known as Hypoadrenocorticism or adrenal insufficiency

Addison's disease is a condition in which the adrenal glands (small glands located near the kidneys) do not produce enough hormones (corticosteroids). These chemicals and hormones help the dog's body regulate sodium and potassium levels, which are important for controlling blood pressure, heart function, and the nervous system. Addison's disease is not as common as Cushing's disease (the overproduction of hormones), but it still occurs with regular frequency in the dog population. It is difficult to recognize initially, but once diagnosed it can be successfully treated.

Symptoms include:

The symptoms of Addison's disease are very vague and many animals may have symptoms for a long time before the disease is finally diagnosed. Symptoms may come and go, further complicating a diagnosis. In no particular order, these problems include the following:

Loss of appetite	Extreme lethargy
Vomiting	Diarrhea
Weight loss	Muscle weakness

Less common owner observations include weakness and loss of appetite that seems to come and go a few times before the symptoms persist. Some dogs have been observed to shiver, tremble, or shake as if they are cold. Some dogs suddenly collapse and quickly seem to develop a shock-like condition.

Diagnosis:

Addison's disease in dogs is confirmed by a blood test called an ACTH stimulation test. Because the disease is not very common and has a wide variety of symptoms, the ACTH test is often done after several other tests to rule out more common diseases.

ACTH Test - In an ACTH test, the dog is given an injection of the adrenal stimulating hormone ACTH. A normal dog will respond by having an increase in blood cortisol. If a dog with Addison's disease is given ACTH, the dog will not have an increase in blood cortisol and the diagnosis of Addison's disease is confirmed.

*If the animal has a history of weight loss, lethargy, or muscle weakness, which are the symptoms of many diseases, a chemistry profile and blood count may be performed first to look at a number of other body systems. Dogs with Addison's disease often have elevated blood urea nitrogen (BUN) and an elevated creatinine, as well as decreased blood glucose. The blood count may show a chronic anemia. If the bloodwork supports the diagnosis of Addison's disease, then an ACTH challenge test will be performed.

Steps of the test: (your pet will need to be dropped off between 8-9am in the morning after its regular morning meal)

1. A sample of blood will be drawn from your pet to determine the original cortisol levels.
2. Your pet will be given a dose of ACTH gel to stimulate the adrenal glands to release cortisol.
3. 2 hours later another sample of blood will be taken to measure the cortisol levels.
4. The sample will be sent off to the lab and results take about 2-10 days.

Treatment:

Once the disease is diagnosed, treatment is fairly straightforward. The standard treatment involves replacing the mineralocorticoids and glucocorticoids in the body via an injection of Percorten given approximately every 25 days. Percorten replaces the chemicals and hormones that the adrenal glands can no longer produce in dogs suffering from Addison's disease.

Additional Information:

Addison's is primarily a disease of young to middle-aged female dogs, however, a dog of any age and either sex can develop the disease. It does not appear to be more common in any one particular breed. Cats can develop this disease, but it is extremely rare.