

WHAT IS HYPOADRENOCORTICISM?

Hypoadrenocorticism (Addison's) was first discovered in 1855 in human patients by a physician named Thomas Addison for whom the disease is also named. It refers to a condition where there is insufficient production of specific hormones from the adrenal gland.

WHAT ARE ADRENAL GLANDS?

The adrenal glands are 2 small glands that sit above each kidney. They are responsible for secreting various hormones. There are 2 classes of hormones that are specifically affected in patients that have Addison's – mineralocorticoids and glucocorticoids (cortisol). Some patients have deficiencies in both hormones while others may only be glucocorticoid deficient.

Glucocorticoids such as cortisol are critical in maintaining normal sugar, fat and protein metabolism in the body. They are also important in maintaining normal physiologic function in times of stress. Release of glucocorticoids from the adrenal glands is controlled by a hormone called adrenocorticotropic hormone (ACTH) from the pituitary gland.

Mineralocorticoids are the hormones responsible for maintaining normal electrolyte and water balance in the body.

Both of these hormones play an important role in helping the body adapt to stressful situations, without which the body fails to function correctly.

WHAT ARE THE SIGNS OF ADDISON'S DISEASE?

Unfortunately, the signs of hypoadrenocorticism can be very vague. Signs can range from malaise, lethargy and poor appetite to collapse and shock. The variability of symptoms can mimic a wide range of other illnesses such as kidney disease, neurologic diseases, or gastrointestinal disease.

HOW IS ADDISON'S DIAGNOSED?

In addition to clinical signs and history, there may be clues in the routine blood tests that may be suggestive of this disease. If your veterinarian suspects Addison's disease based on your pet's signs or lab data, the most definitive test is an ACTH stimulation test. Sometimes, determining the baseline cortisol level is used as a screening test.

HOW IS ADDISON'S DISEASE TREATED?

The main goal of therapy in these patients is providing them with a source of the hormones they need. This may be a combination of oral and injectable medications. With treatment, a patient with hypoadrenocorticism may live a normal life. Electrolyte levels and kidney function may need to be periodically evaluated. Monitoring how they are doing at home is also important. Is your pet eating well? Any vomiting or diarrhea? Lethargy? Any sign of illness should prompt a phone call or a visit to your veterinarian. In the event that your pet is feeling ill and may be experiencing a relapse of their Addison's disease, your veterinarian **may** also instruct you to give an extra dose of prednisone when you start to see any problems.