HYPOADRENOCORTICISM (ADDISON’S DISEASE)

What is it? Hypoadrenocorticism (Addison’s Disease) is an endocrine disorder resulting from deficient production of glucocorticoid and mineralocorticoid hormones. These hormones are produced by the adrenal glands, which are located near the kidneys. Mineralocorticoids influence electrolyte balance in the body and help maintain normal levels of sodium and potassium. Corticosteroid hormones enable the body to adapt physiologically to stress. Patients affected by Addison’s Disease have a deficiency of one or both classes of these hormones.

What animals are affected? Addison’s Disease is an uncommon endocrine disorder in dogs and it is rare in cats. The condition most commonly diagnosed in middle-aged female dogs, although males can be affected too. West Highland White Terriers, Poodles, and Great Danes are over-represented.

What are the signs? Symptoms of Addison’s Disease are highly variable, and affected pets often have a classic waxing-waning course of illness. Addison’s Disease is often referred to as “the Great Imitator” due to the variety of symptoms that can develop. Clinical signs may include: depression, lethargic behavior, weight loss, weakness, vomiting and diarrhea, increased water intake and increased urination, and low heart rate. Dogs with severe electrolyte abnormalities and dehydration can exhibit collapse and shock, classically known as an “Addisonian Crisis”.

How is it diagnosed? Addison’s Disease is diagnosed by performing an ACTH stimulation test and measuring serum cortical concentrations. Dogs or cats with Addison’s Disease have low or undetectable baseline serum cortical levels, and cortisol levels fail to increase after administration of ACTH (adrenocorticotropic hormone).

How is it treated? Treatment of Addison’s Disease involves replacing the missing hormones. Mineralocorticoids are replaced using a daily medication called fludrocortisones (Florinef) or with desoxycorticosterone (DOCP) injections administered approximately once every 25 days. Glucocorticoids are replaced using low doses of prednisone, which is an oral corticosteroid medication. Pets that develop an Addisonian Crisis need to be hospitalized for aggressive IV fluid therapy and careful monitoring.

What after care is needed? Frequent follow-up care is needed after the initial diagnosis of Addison’s Disease. Electrolytes and other bloodwork are advised every 3-6 months. Medications doses are adjusted based on bloodwork results. Some dogs will require increased prednisone doses during times of stress (boarding, travel, surgery, etc.).

What is the prognosis? The prognosis for pets diagnosed with Addison’s Disease is excellent when diligent owners and veterinarians team up to manage these cases. Owner education is the most important factor in the long-term success of treatment. Most pets will lead normal lives and have a normal life expectancy.

Can it be prevented? No, but careful monitoring can help prevent development of a life-threatening Addisonian Crisis.