Partner Veterinary URGENT CARE

Addison's Disease

Addison's disease, or hypoadrenocorticism, is a disease in dogs that occurs when the adrenal glands do not function properly. The adrenal glands sit near the kidneys and are responsible for the production of numerous hormones. Among these hormones are aldosterone, which plays a critical role in controlling electrolyte and fluid balance, and cortisol, which supports vital metabolic functions like maintaining blood sugar and modulating the body's stress response.

If the adrenal glands are unable to produce these hormones, pets can develop numerous and serious health complications. They may show chronic signs of illness including vomiting, diarrhea, trembling or tremoring, picky or poor appetite, and weight loss, which worsen during times of stress or illness. Importantly, Addison's disease can also cause life-threatening dehydration, shock, and electrolyte imbalances which results in an Addisonian crisis.

Rarely, dogs are born with Addison's. More commonly, it's diagnosed in young to middle-aged dogs who have acquired the condition. Female dogs are more commonly affected than males and some breeds are over-represented, including Standard Poodles, Portuguese Water Dogs, Great Danes, and West Highland Terriers. Diagnosis may be suspected based on clinical signs-including episodic or severe GI upset-or screening blood work, which may show changes to the white blood cell count, kidney values, or electrolytes.

A definitive diagnosis requires a specific blood called an ACTH stimulation test which measures the adrenal glands' production of specific hormones (usually cortisol) in response to a medication we give. Dogs with Addison's most often show a very low response to ACTH stimulation.

An Addisonian crisis is life-threatening and requires hospitalization to correct severe dehydration and to balance electrolyte and blood sugar levels. Pets often have severe or bloody diarrhea, vomiting, weakness, and low blood pressure. Once stable, pets with Addison's require long-term treatment with medications – often a combination of an oral steroid to replace cortisol and an injectable medication to replace aldosterone.

A primary care veterinarian or veterinary internist should be involved in the long-term monitoring and management of these patients. In times of stress, medications may need to be adjusted to avoid an Addisonian crisis.