

## Canine hypoadrenocorticism or Addison's disease

Addison's disease is caused by failure of glucocorticoid and mineralocorticoid secretion from the adrenal gland. These glands sit next to the kidneys. Glucocorticoids and mineralocorticoids are naturally occurring substances that control the body's response to physiological stress (glucocorticoids) and the balance of electrolytes (sodium, potassium, and chloride - mineralocorticoids).

### Clinical Signs

Some breeds are predisposed to developing Addison's: Standard Poodles, West Highland white terriers, Great Danes and Bearded Collies; however any breed of dog may develop the condition. The condition usually develops for the first time in young to middle aged dogs. Dogs may have had vague, intermittent clinical signs or present in an acute crisis. The common signs are anorexia, vomiting, diarrhoea, weakness, exercise intolerance, and/or drinking more. Sometimes these signs may happen after a stressful event such as kennelling, veterinary attention, or changes in the dog's environment.

### Diagnosis

Dogs are diagnosed when they present with the above signs and have the following abnormalities detected on a blood test: hyperkalaemia (high potassium), hyponatraemia (low sodium), hypochloraemia (low chloride), hypercalcaemia (high calcium), and azotaemia (raised kidney values). Confirmation of the disease can be achieved by performing an ACTH stimulation test which will show reduced function of the adrenal glands.

### Treatment

Treatment of the acute crisis may be a medical emergency and often requires your dog to stay in the hospital for several days.

Once stabilised, your dog will need to have life-long medications to control the disease. Treatment of the disease requires two medications long term.

- Fludrocortisone acetate (mineralocorticoid): This medication is needed once daily for life. Often as the disease progresses a higher dose of the medication is needed.
- Prednisolone or steroid (glucocorticoid): This medication is needed initially twice daily, but in the long term we will aim to stop this medication. **However, as your dog will not be able to respond to physiological stresses such as a change in environmental temperature, a visit to the vets, or kennelling, your dog will have to have a prednisolone tablet at these occasions.** Additionally, if your dog develops diarrhoea or is unwell for any reason give a prednisolone tablet before you contact the vets. We will need to monitor your dog with blood tests regularly – usually every 3 months once stabilised, and additionally when he is unwell.

### Prognosis

Dogs with Addison's can do very well and live a **normal life** on the medications. However, if your dog becomes unwell please give a prednisolone tablet and call the vet as soon as possible. This is just because your dog will not be able to respond to illness as a dog without Addison's would be able to.