

Addison's disease, also known as hypoadrenocorticism

Addison's disease is considered a relatively rare disease in dogs – when it does occur it tends to be in middle aged female dogs, and poodles are the most commonly affected breed. It usually results from the body starting to destroy its own adrenal cortex - an organ in the body which produces two essential products:

- Glucocorticoids (also known as steroids)
- Mineralocorticoids (the most important one being called aldosterone).

Deficiency in glucocorticoids causes a loss of appetite, anaemia and an inability to cope with times of stress.

Deficiency in mineralocorticoids leads to a loss of sodium and water, which may have caused your dog to drink and urinate more, become lethargic, depressed and nauseous. This deficiency also results in failure to eliminate potassium from the body, which causes muscle weakness and in severe cases, poor heart function.

It can also develop if your dog has been given steroids for another condition over a prolonged period of time and these supplementary steroids are stopped abruptly – this can result in the body not having chance to start producing its own steroids again.

Clinical signs of Addison's disease

Some dogs presenting with the disease have a chronic history of non-specific, waxing and waning symptoms which are often exacerbated by times of stress such as kennelling or building work going on in your home. However, other dogs will present more acutely, sometimes with collapse and in this situation, the condition can progress rapidly, being potentially fatal without quick diagnosis and treatment.

Diagnosis of Addison's disease

If your vet suspects your dog may be suffering from Addison's disease, a blood sample is required – although a routine blood sample does not diagnose Addison's disease, in the majority of cases it will give vital clues that will make a diagnosis highly likely. Your vet will then be able to perform a more specialist test called an ACTH stimulation test which is the gold standard test to diagnosis Addison's. Rather than just involving a single blood test, this involves us giving your dog an injection to stimulate her ability to produce steroids. A second blood sample an hour later will prove they have Addison's disease if the test results shows there has been no further steroid production despite being stimulated.



Treatment of Addison's disease

Although it is always upsetting for a pet to be diagnosed with a life-long condition, it is reassuring to know that Addison's is a very treatable disease, provided she receives regular medication and attends regular check-ups.

1. Supplementation of mineralocorticoids

Florinef (fludrocortisone) is the drug we prescribe to supplement the mineralocorticoids they are not producing. It will be required for life. These tablets are usually given once daily and must be kept in the fridge at home. It is advisable to wear gloves to administer the tablets. Your pet will be started on a dose calculated according to weight, but this will need to be adjusted depending on their own specific requirements. Dose changes are made on the basis of follow-up blood samples looking for sodium and potassium levels in the bloodstream. Once they are on a stable dosage, repeat check-ups are advised every 3 months to make sure requirements have not altered.

2. Supplementation of glucocorticoids (steroids)

Following initial diagnosis, your dog will be started on supplementary steroids. For many patients, this dose is gradually reduced or eventually stopped, however some patients require a small dose long term. During periods of stress, they will need additional steroid supplementation - your vet will advise you on a suggested increased dose you can give pre-emptively should you anticipate a stressful event such as a period of kennelling or visitors at your house.

3. Salt supplementation

Your vet will be able to advise you as to whether supplementing them with salt in their diet is necessary – often a pinch of salt in each meal helps the condition stabilise more quickly.

4. Emergency treatment

Some pets require additional treatment to get them stabilised in the initial stages – often a short stay in our practice on an intravenous drip is required to improve circulation. Your vet will be able to advise on such treatments depending on their presenting clinical status.



- Addison's can be a potentially very serious disease
- It is a life-long condition requiring life-long medication
- Remember to attend regular check-ups to check your pet's medication requirements haven't altered
- Remember during periods of stress, they may require extra steroids – speak to your vet should you be planning anything possibly stressful, for advice on pre-emptive dosage adjustments