

General Practice Service  
Willows Information Sheets

# Hyperadrenocorticism (Cushing's syndrome)





## Hyperadrenocorticism (Cushing's syndrome)

### What is hyperadrenocorticism?

Hyperadrenocorticism occurs when the body produces too much of the hormone called cortisol. Cortisol and cortisone are known to most people only as medications ('steroids'), but they are actually also hormones produced by the body.

Cortisol is produced by two small glands situated near the kidneys called the adrenal glands. The production and release of cortisol from these glands is controlled by another hormone called ACTH, which is produced by a small gland in the brain called the pituitary gland.

## Why do dogs get hyperadrenocorticism?

Two forms of hyperadrenocorticism occur:

- 1) **Pituitary-dependent hyperadrenocorticism** is the most common form and is usually due to a small slow-growing tumour in the pituitary gland in the brain. This tumour produces large amounts of ACTH, which in turn leads to the release of large amounts of cortisol from the adrenal glands.
- 2) **Adrenal-dependent hyperadrenocorticism** occurs when a tumour in the adrenal glands starts to produce large amounts of cortisol. Some of those tumours can unfortunately be cancerous. This problem can occur in one or, rarely, both adrenal glands.

## What are the clinical signs of hyperadrenocorticism?

High levels of cortisol affect the whole body and can lead to problems such as:

- Increased thirst
- Increased hunger
- Frequent urinating and large volumes of urine
- 'Pot-bellied' appearance
- Lethargy
- Muscle wasting
- Hair loss and thinning of the skin
- Being prone to infections

Other changes are also possible and affected animals may not necessarily have all of the problems listed. In some patients concurrent diabetes mellitus may be present (See [Diabetes mellitus information sheet](#)), and this can complicate the diagnosis and management of both diseases.

## How is the disease diagnosed?

To diagnose hyperadrenocorticism, blood and sometimes special urine tests are necessary. In healthy and diseased dogs, cortisol levels fluctuate greatly during the day, so simply measuring the cortisol level is not enough to diagnose this condition. Instead, tests are done to measure the ability of the body to control cortisol levels, which usually requires two to three blood tests during a day or several urine tests performed over several days. Most commonly, patients undergoing investigation have to stay with us for a few hours. Sometimes it is necessary to perform a second test as the disease can sometimes be difficult to diagnose.

## How is hyperadrenocorticism treated?

Hyperadrenocorticism is hardly ever curable and instead needs to be controlled, so most dogs need to be on lifelong medication. In rare cases, an operation is possible to remove a tumour in one of the adrenal glands. This is a complicated procedure which is generally performed by specialists.

Usually capsules or tablets are given to control the production of cortisol. Dose requirements differ greatly between dogs and may change over time, therefore we have to repeat blood or urine tests occasionally to make sure that the cortisol levels are still controlled.

Although the level of cortisol needs to be reduced in dogs suffering from hyperadrenocorticism, it is vital not to stop production completely as this can lead to life-threatening complications. If your dog is being treated for hyperadrenocorticism we will discuss this issue with you when we start your dog on the medication and make sure that you have some emergency steroid tablets at home in case the cortisol level in the blood drops too much.

## My dog has hyperadrenocorticism – what is the outlook?

Although hyperadrenocorticism is quite a serious disease which can affect life expectancy, we will do all we can to enable your dog to enjoy life, hopefully for a long time to come. The earlier the condition is diagnosed and the more closely the effects of treatment are monitored, the better the outlook in most cases.

## Can cats get hyperadrenocorticism?

Cats very rarely get hyperadrenocorticism and unfortunately affected individuals have a poor prognosis.

***If you have any queries or concerns regarding your pet and hyperadrenocorticism, please do not hesitate to [contact us](#).***

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