

Understanding Cushing's Disease in Dogs

If your dog has been drinking more water, urinating frequently, panting a lot, developing a pot-bellied appearance or thinning hair coat, they may be showing signs of **Cushing's disease** — a common hormonal disorder in middle-aged and older dogs.

The good news? With early diagnosis and proper management, dogs with Cushing's disease can continue to enjoy happy, active lives for many years.

What Is Cushing's Disease?

Cushing's disease (also called **hyperadrenocorticism**) happens when your dog's body produces **too much cortisol**, a hormone made by the adrenal glands.

Cortisol is essential for many normal body functions — it helps regulate metabolism, manage stress, and support the immune system. However, **too much cortisol** over time can cause serious health issues, including muscle weakness, liver enlargement, and suppression of the immune system.

Causes of Cushing's Disease

There are **three main types** of Cushing's disease in dogs:

1. Pituitary-Dependent Cushing's Disease (PDH)

- The most common form (about 80–85% of cases).
- Caused by a small, usually benign tumor on the **pituitary gland** in the brain.
- This tumor sends extra signals to the adrenal glands, telling them to make too much cortisol.

2. Adrenal-Dependent Cushing's Disease (ADH)

- Caused by a **tumor on one of the adrenal glands** themselves.
- This tumor makes cortisol independently, without needing pituitary stimulation.

3. Iatrogenic (Medication-Induced) Cushing's Disease

- Occurs when a dog has been receiving **corticosteroid medications** (like prednisone) for a long time at high doses.
 - This form can often resolve when the medication is reduced or discontinued under veterinary supervision.
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Common Signs and Symptoms

Because cortisol affects so many systems in the body, the signs of Cushing's disease can vary — and they often develop gradually.

Typical symptoms include:

- Increased thirst and urination
- Increased appetite
- Panting, even at rest
- Pot-bellied or bloated appearance
- Thinning skin or hair loss (especially on the body)
- Recurrent skin infections or poor wound healing
- Muscle weakness or lethargy
- Weight gain or redistribution of fat
- Thin coat or slow hair regrowth after grooming

Many of these signs can also appear in other conditions, so a **thorough veterinary exam and testing** are essential for an accurate diagnosis.

How Is Cushing's Disease Diagnosed?

Diagnosing Cushing's disease can be complex, because cortisol levels naturally fluctuate throughout the day. Your veterinarian will usually begin with:

- **Blood tests** to screen for abnormalities (such as elevated liver enzymes or cholesterol).
- **Urinalysis** to check urine concentration and look for signs of infection.
- If these suggest Cushing's disease, more specific tests are used, such as:
 - **Low-Dose Dexamethasone Suppression Test (LDDS)** – the adrenal glands are stimulated by giving an injection of dexamethasone (a synthetic steroid). Blood samples are collected prior to the injection, and then 4 hours and 8 hours after. This test can help indicate if the Cushing's is pituitary or adrenal dependant.
 - **ACTH Stimulation Test** – An injection of synthetic ACTH (a hormone which is part of the adrenal signaling system) is given. Blood samples are collected prior to the injection and 1 hour after. This test is also used for monitoring response to Cushing's treatment.
 - **Ultrasound** – can help determine if the disease is pituitary- or adrenal-dependent., and rule out other concurrent diseases that have similar symptoms.

Sometimes, your veterinarian may also recommend referral to an internal medicine specialist or for an MRI or CT scan if an adrenal or pituitary tumor needs closer evaluation, or if there are concurrent diseases that will make treatment more complicated.

Treatment Options

Treatment depends on the type and severity of the disease, as well as your dog's overall health.

Medical Management

Most dogs are treated with **medication** that reduces the adrenal glands' cortisol production. The most commonly used drug is **trilostane (Vetoryl®)**, given by mouth once or twice daily. This treatment helps control symptoms and restore hormone balance.

Regular **blood monitoring** is very important to ensure the dose is safe and effective.

Surgical Treatment

If an **adrenal tumor** is the cause, surgical removal of the affected gland may be an option. Your veterinarian or a specialist can discuss whether your dog is a good candidate for surgery.

Medication-Induced Cushing's

If the disease was caused by long-term steroid use, your veterinarian will carefully taper and adjust the medication to reduce cortisol production safely.

Ongoing Monitoring and Care

Cushing's disease requires **lifelong management**. Once treatment begins, your veterinarian will schedule regular checkups to:

- Monitor your dog's symptoms and overall well-being
- Perform blood tests (including an ACTH stimulation test) to track cortisol levels
- Adjust medication doses as needed

At home, you'll play an important role by observing your dog's appetite, thirst, urination, energy level, and behavior. Keeping a simple log can help your vet fine-tune your dog's care plan.

What Is the Prognosis?

With appropriate treatment and regular monitoring, most dogs with Cushing's disease live **normal or near-normal lifespans**.

Many owners report that once their dog's hormone levels are under control, they see:

- Increased energy
- Healthier coat and skin
- Improved appetite and attitude
- More stable weight and hydration

The key is **consistent treatment and follow-up care** to maintain balance and prevent complications.

When to Call Your Veterinarian

Contact your vet if you notice:

- Sudden changes in thirst, urination, or appetite
- Vomiting, diarrhea, or loss of appetite while on medication
- Weakness, collapse, or disorientation
- Return of previous symptoms after they had improved

These signs may mean your dog's cortisol levels are too high or too low, and medication adjustments are needed.

A diagnosis of Cushing's disease can feel overwhelming at first — but you're not alone. With careful treatment, regular veterinary monitoring, and your daily care at home, dogs with Cushing's can thrive for years.

If you've noticed signs of Cushing's disease in your dog, or if your pet has been newly diagnosed, our veterinary team is here to answer questions, provide treatment options, and help you every step of the way.