



Your dog has been diagnosed with Cushing's disease, which is an excess of cortisol hormone.

Although the adrenal glands are small, the cortisol hormone they secrete works in unison with other internal organs, particularly the liver, and have a profound effect on the body. Cortisol maintains a normal blood sugar level, facilitates metabolism of fat, and supports the vascular and nervous systems. It affects the skeletal muscles, the red blood cell production system, the immune system, and the kidney system. The level of this hormone continually fluctuates in the bloodstream, which adds to the difficulty of diagnosing Cushing's.

Cushing's disease is a common condition in older dogs and is often mistaken for signs of normal aging. Some dogs with Cushing's disease show the classic symptoms, while others show only a few vague symptoms. These include:

Polyphagia – excess appetite

Polyuria/polydipsia (PU/PD) – This is excess urinating and excess drinking of water. Several other important diseases cause these symptoms also, notably liver disease, kidney disease, major infections and sugar diabetes.

Pot bellied abdomen – usually due to abdominal muscle weakening.

Thin skin and hair loss (usually symmetrical) – secondary skin infections are common.

Others – lethargy, muscle wasting, poor appetite and behavioral changes.

Several canine breeds are prone to getting Cushing's, including Poodles, Yorkies, Beagles, Dachshunds, Boston Terriers and Boxers. This is a serious condition, and maintaining a dog with Cushing's disease required vigilance and commitment on the part of the owner.

Left untreated, Cushing's disease will progress and can lead to life-threatening disorders such as diabetes, pancreatitis, congestive heart failure, and liver and kidney failure, and to chronic maladies such as hypothyroidism and infections of the skin, ears, gums, eyes or bladder. Treating Cushing's does not necessarily give your pet a longer life. The goal of therapy is to give your pet a better quality of life.

The short-term prognosis is very good. Treated, one would expect symptoms of Cushing's to fully resolve over the course of 4-6 months. Excess drinking and urinating abate quickly. It may take several months for hair and coat improvement to be observed. Dogs generally are more comfortable after the disease is under control and may live happily for years. Alternatively, some dogs become very uncomfortable if arthritis, allergies or other inflammatory conditions are unmasked once the excess cortisol is removed, paradoxically reducing the animal's quality of life. We can help your pet if this occurs.

Mitotane

Your Pet's Dose _____ twice a day.

Mitotane, known by the trade name of Lysodren, selectively destroys part of the adrenal gland. This limits the amount of cortisol that the adrenal gland can secrete. Pets that are on insulin for diabetes mellitus need to have their insulin dose adjusted downwards when given mitotane. It should be administered with meals to enhance its absorption.

The initial treatment of mitotane requires daily administration of the drug until an endpoint is reached:

- Thirst decreases to less than _____ of water per 24 hours.
- Appetite decreases to "normal."
- The warning symptoms listed below occur.

If any one of these endpoints are reached, you should stop the daily mitotane. After the end of the initial treatment period, mitotane is administered once or twice a week indefinitely for maintenance therapy.

Mitotane's intended effects and side effects are virtually indistinguishable. It is more useful to consider the warning symptoms which can occur when this drug works too well, meaning it has caused insufficient amounts of cortisol in the body:

- Vomiting
- Diarrhea
- Weakness/incoordination

You need to closely observe your pet when it is on mitotane for any of these warning symptoms. If they occur, you are to stop the use of mitotane immediately. We will give you cortisone pills to give at home if these warning symptoms occur.

Two long term results can occur while on mitotane maintenance therapy:

1. Mitotane can be so effective that the adrenal glands simply can no longer create enough cortisol. Dogs with this problem have to be put on supplemental prednisone for the rest of their lives.
2. Relapses of Cushing's can occur within 12 months, even while on maintenance therapy.

Both of these outcomes demonstrate the need for continual monitoring of your pet. This means close observation at home and ACTH stimulation tests every 3-6 months.

The goal of treatment is to improve quality of life and perhaps lengthen life, but except in situations where an adrenal tumor can be completely removed or where a dog can be weaned off external sources of cortisone, Cushing's disease is not curable. Although most dogs with Cushing's disease cannot be cured, their quality of life (as well as the owner's quality of life) can be improved, and their lives may be extended with early intervention. It is often possible to successfully manage this disease for years.

Cushing's syndrome information on the internet:

www.marvistavet.com/what-exactly-is-cushings-syndrome.pml

www.veterinarypartner.com – Type in "cushings" in the search box.