



HERMITAGE
Veterinary Hospital
SHARING THE CARE

* Information adapted from VIN *

Hyperadrenocorticism (Cushing's Disease)

Cushing's disease, also called Cushing's syndrome or hyperadrenocorticism, results from an overproduction of the hormone cortisol. Cortisol is produced by the adrenal glands, located next to the kidneys, and adrenal glands are stimulated to produce cortisol by the pituitary gland located at the base of the brain. There are two types of Cushing's disease. In adrenal-dependent Cushing's disease, an adrenal gland overproduces cortisol because of an adrenal tumor. In pituitary-dependent Cushing's disease, the adrenal glands overproduce cortisol because they are overstimulated by a pituitary tumor.

Treatment: Trilostane

Trilostane is an inhibitor of an enzyme called 3-beta-hydroxysteroid dehydrogenase. This enzyme is involved in the production of several steroids, including cortisol. Inhibiting this enzyme inhibits the production of cortisol.

Trilostane is given once or twice a day with food. It is important if just giving once daily that it is given in the morning. If a dose is missed, give the next dose at its regularly scheduled time. Common side effects are mild lethargy and appetite reduction especially when medication is started and the body adapts to its hormonal changes. More serious Addisonian reactions (see below) have been reported where the adrenal cortex actually dies off and the patient is left with a cortisol deficiency. Most trilostane reactions are minor and can be reversed by discontinuing the trilostane; however, permanent Addisonian reactions are possible. This reaction is idiosyncratic with trilostane, meaning it can happen unpredictably and at any dose. For this reason, monitoring blood test are very important with trilostane.

ACTH Stimulation Testing

The dose is modified based on results of a periodic ACTH stimulation test (10-14 days, 30 days, 90 days then every 6 months).

The test is completed by giving a dose of ACTH (adrenocorticotrophic hormone), which is the hormone the pituitary gland uses to stimulate release of cortisol. Basically, we give a dose and see if we get a normal cortisol release or an extra-large one. A baseline cortisol level is drawn, the ACTH is given as a shot, and then in 1-2 hours a second cortisol level is measured to compare. In this way, the adrenal gland's potential to release cortisol is measured.

To get the most accurate and useful results, we recommend doing the testing 4-6 hours after giving the morning dose. It is important to come in at the same time for every subsequent test to be able to accurately compare results for dosage adjustment.

Home Monitoring

Please contact your veterinarian immediately if your dog stops eating or drinking, or becomes lethargic or ill.