

Cushing Disease

The low dose dexamethasone test has confirmed the diagnosis of Cushing disease. Cushing is the overproduction of cortisol. Cushing disease can be either pituitary in origin (80-85%) or a tumor on the adrenal gland. To differentiate type, an ultrasound is needed. With adrenal gland tumours, 50% of them will be malignant and can metastasize to other organs and the treatment is often surgical removal to avoid the need for long term medications. If it is a pituitary tumour, we use a medication called trilostane or vetoryl. The mode of action of the medication is to suppress the tumour and improve clinical signs. The risk is that the medications suppresses too much and causes addisons disease. For this reason, we slowly increase medication doses and monitor closely.

The monitoring involves doing an ACTH stimulation test at 10-14 days, 30 days, 3 months and 6 months after starting. Once ideal levels are achieved, this test is run every 6-12 months. The cost of the test is **[\$286.27]**. We also check electrolyte levels at 14 days for a cost of **[\$36.21]** and at 30 days. And a mini panel at 3 months as well **[\$175]**.

Trilostane is given twice daily about 12 hours apart with food. The ACTH stim test should be completed 4-6 hours after giving the pill, and done at around the same time for each ACTH test following.

The clinical signs can take up to 3 months to significantly show improvement, although we can see minimal improvement as early as 2 weeks.

The medication vetoryl does not come in a 20 mg formula. For cost effectiveness, we can get it compounded from Strathcona into 20 mg or use a compounded trilostane. Otherwise, vetoryl comes in a 10mg, 30mg or 120 mg dose. The risk with any type of compounding is consistency.

The biggest risk with treating is the development of Addisons, a condition where there is a deficiency in cortisone. The reactions are typically temporary and once the pet is off medication, the symptoms resolve. Common symptoms are vomiting, diarrhea, loss of appetite and lethargy. If left untreated/unresolved, this condition can be fatal.