Cushing's Disease

*Also known as Hyperadrenocorticism

Cushing's is a disease affecting the adrenal glands (small glands located near the kidney that secretes several different substances that help regulate normal body functions which cause them to produce an overdose of hormones (glucocorticoids).

Symptoms include:

Increased water intake and urination are the most common clinical signs of Cushing's disease in the dog. Other signs that may be seen include decreased muscle mass, weakness, thinning of the skin and hair loss. Cushing's disease may also decrease the efficacy of the dog's immune system, making him/her more susceptible to infection. Cushing's disease has an insidious onset, so it is not surprising that many dogs have the disease for an extended period of time before the owner will notice a problem. Dilute urine and changes in the dog's blood such as increased alkaline phosphatase (a liver enzyme) may point towards Cushing's disease.

Diagnosis:

Low Dose Dex Test:

A low-dose dexamethasone suppression (LDDS) test can also be used to diagnose the disease. This is the most reliable test to determine this condition.

Steps of the test: (your pet will need to be dropped off at 8am in the morning after its regular morning meal)

1. A sample of blood will be drawn from your pet to determine the original cortisol levels.
2. Your pet will be given an injection of dexamethasone to stimulate the suppression of cortisol.
3. At 4 hours, another sample of blood is taken.
4. At 8 hours a final sample of blood is taken.
5. The sample will be sent off to the lab and results take about 2-10 days. Normally, the cortisol levels should decrease between the blood samples because the corticosteroid suppresses cortisol. If it fails to drop, Cushing's disease is likely.

ACTH test:

The test determines the ACTH levels released by the pituitary gland (glands in the brain that give instructions to the adrenal glands to release hormones). This test is more commonly used on pets who have already been diagnosed with Cushing's are monitoring the efficacy of drugs used to treat Cushing's.

Steps of the test: (your pet will need to be dropped off at 8am in the morning after its regular morning meal)

1. A sample of blood will be drawn from your pet to determine the original cortisol levels.
2. Your pet will be given a dose of ACTH gel to stimulate the adreneal glands to release cortisol.
3. 2 hours later another sample of blood will be taken to measure the cortisol levels.
4. The sample will be sent off to the lab and results take about 2-10 days.

Treatment:

Pets are placed on a hormone suppressant and testing is done from time to time to maintain normality.

Trilostane: An enzyme inhibitor which decreases the amount of cortisol in the bloodstream. It can currently be acquired in Canada through your veterinarian, but it may take a bit more time and paperwork. Although trilostane is reported to have fewer negative side effects, every drug has its advantages and benefits.

*Regardless of the drug chosen, the dog would remain on the medication for life. Blood levels of cortisol would have to be monitored on a regular basis to ensure the efficacy and safety of the medication being used.

*Cushing's disease most commonly occurs in older dogs older than eight years. Some breeds are more genetically predisposed to developing Cushing's disease. These breeds include the Schnauzer, Beagle, Boston Terrier, Boxer, Dachshund, and Poodle.