

Cushing's Disease (Hyperadrenocorticism)

Hyperadrenocorticism or Cushing's disease occurs when the adrenal gland secretes more cortisol (steroids) than the body requires. The pituitary gland in the brain is responsible for the over stimulation of the adrenal gland 80-85% of the time. In the remaining cases of Cushing's disease there is a tumor of the adrenal gland.

Clinical signs for this disease syndrome can include: increased thirst, increased urination, increased appetite, abdominal enlargement, muscle weakness, increased panting, lethargy, obesity, and hair loss.

Diagnosis of hyperadrenocorticism can be complicated. Baseline blood work can arouse suspicion with an increase in certain liver enzymes. A special urine test, called a urine cortisol creatinine ratio, can also be suggestive of Cushing's disease. The next step in diagnosis generally is an 8-hour blood test. Sometimes this blood test must be followed by another blood test or an ultrasound to determine if the disease is pituitary dependent or due to an adrenal tumor.

Treatment and/or management is dependent on the type of Cushing's disease. Adrenal tumors are often treated by surgery. Medications can also be used but are less effective in the case of an adrenal tumor. Pituitary dependent hyperadrenocorticism is managed medically. A drug called lysodren (o,p'-DDD) is used most often. It is derived from the insecticide DDT and it destroys certain areas of the adrenal gland. Another drug called Anipryl (or selegiline) can also be used but its effectiveness is questionable.

Instructions for the loading dose phase of Lysodren:

The loading dose phase generally lasts 5-9 days. During this time please follow the guidelines carefully and call us if you have any concerns.

1. Response to the treatment will be gauged by evaluating the patient's attitude, appetite and daily water intake. A decrease in appetite is normally the first side effect seen with lysodren (o,p'-DDD).
2. We will initially start with a loading dose and later decrease this dose to a maintenance dose of lysodren.
3. During the loading dose phase, feed 1/3 of the normal amount of food twice a day. We are deliberately feeding less than usual to make your dog hungry. Give the medicine twice a day with food.
4. STOP the lysodren and call us if your dog: (1) shows any reduction in appetite (2) vomits (3) has diarrhea (4) is unusually listless, or (5) drinks much less than usual (i.e., less than 60 ml/kg/day (1 ounce = 30 ml)).
5. Keep prednisone on hand and use if anorexia, vomiting, diarrhea, weakness, or lethargy occurs. Please call us to notify us that these symptoms occurred.
6. Start medicine on Saturday (day 1). At the point when you see any signs mentioned in #4 or on day 10, whichever occurs first, we need to do a blood test. This test generally takes about 2 hours (ACTH stimulation test). Please note that if your dog is receiving prednisone, it must be discontinued at least 24 hours before this blood test.