Desert Hills
ANIMAL CLINIC
Family Healthcare for your Pet

Bryan Neidigh, DVM
Cheryl Rahal, DVM ACVIM
Jason Gold, DVM

HYPERTHYROIDISM

What is Hyperthyroidism?
Hyperthyroidism is an abnormal, sustained, high overall metabolic rate caused by high levels of thyroid hormones. Hyperthyroidism in cats most often is caused by hyperfunctioning thyroid gland. Rare cases of cat hyperthyroidism (1- 2%) are caused by hyperfunctioning thyroid tumor. Hyperthyroidism is extremely uncommon in dogs, but it has been seen in some dogs with thyroid cancer and in dogs with oversupplementation of thyroid hormone. Incidence/Prevalence: It is the most common endocrine disease in cats and one of the most common diseases of late middle-aged and older cats. The average age it is seen in cats is approximately 13 years, with a range of 4-22 years. There is no predominance according to sex. Its true incidence is unknown, but diagnosis of the disease is increasing.

What Does It Affect?
The systems affected include the muscles and skeleton, the heart and blood vessels , the gastrointestinal tract, the kidneys, the nervous system, and there are behavioral changes as well.

What are the Symptoms of Hyperthyroidism?
The signs are multisystemic and reflect the overall increase in metabolism. In less than 10% of patients, the main symptom is apathy. These patients exhibit atypical signs (e.g., poor appetite, depression, and weakness). Typically the pet's history may include weight loss, increased appetite, vomiting and diarrhea, frequent urination, rapid heartbeat, hyperactivity, difficult breathing, and aggression. Physical examination findings may include an enlarged thyroid gland, poor body condition, a heart murmur and fast heart rate, unkempt appearance, and perhaps thickened nails.

How is Hyperthyroidism Diagnosed?
The history & physical examination may make a doctor suspect the condition, but blood tests are required to confirm it.

How is Hyperthyroidism Treated?
DIET: Poor absorption of many nutrients and high metabolism suggest the need for a highly digestible diet with high bioavailability of protein.
SURGICAL CONSIDERATIONS: Surgical thyroidectomy (removal of the thyroid) is one of the recommended treatments for hyperthyroidism in cats. Surgical treatment of thyroid carcinoma (dogs and cats) usually is not curative but can be provide temporary "cures."
MEDICATIONS:
• Methimazole (Tapazole) is the antithyroid drug most often used. Antithyroid drugs have several side effects. Loss of appetite and vomiting are common side effects of methimazole. Rare side effects include self-induced scratching of the face, low blood platelet counts associated with abnormal bleeding, low white blood cell counts, and liver inflammation. These effects usually develop within the first 3 months of treatment and may or may not necessitate drug cessation and alternative treatment (depending on severity).
• Radioiodine is a safe and effective treatment. Unfortunately, its use is limited because of the small number of veterinary facilities offering this treatment. High doses of radioiodine can be palliative in the treatment of thyroid cancer but are rarely curative.
PATIENT MONITORING: Physical examination, blood cell counts (with platelet count), serum biochemical analysis, and serum T4 (thyroid hormone) determination every 2-3 weeks for the initial 3 months of treatment are often recommended. The dosage of methimazole is adjusted to maintain the serum T4 concentration in the low-normal range.

What is the Long-term Outlook?
The prognosis for the uncomplicated disease is excellent. Recurrence is possible and is most commonly associated with poor owner compliance with medical management. Regrowth of hyperthyroid tissue is possible but uncommon after surgical thyroidectomy and radioiodine treatment. In dogs or cats with thyroid cancer, the prognosis is poor. Treatment with radioiodine, surgery, or both usually is followed by recurrence of disease. Adjuvant chemotherapy is of questionable benefit.

Thank you for this opportunity to serve you!