

## FELINE HYPERTHYROIDISM

### **What is hyperthyroidism?**

Hyperthyroidism is caused by a typically benign tumor of the thyroid gland causing the overproduction of thyroid hormone (T4). This hormone is involved with regulating multiple body systems and overall metabolism, so when the circulating level of thyroid hormone is elevated, it will lead to many other health problems. Affected cats may experience hyperactivity, weight loss despite a voracious appetite, heart murmurs/heart disease, liver disease, kidney disease, vomiting, diarrhea, blindness, high blood pressure, and sudden death.

### **How is hyperthyroidism diagnosed?**

It is critical that a veterinarian perform a thorough physical exam and obtains a complete history on the patient. This information along with comprehensive blood testing including a T4 blood level, urinalysis, and ECG will aid in diagnosing hyperthyroidism. These diagnostic tests will also determine any complications that cat may be facing secondary to hyperthyroidism.

### **Treatment Options:**

The primary goal of treating hyperthyroidism is to reduce the amount of circulating thyroid hormone. Three options are currently available:

1. Daily medication: can be administered orally or topically. Often times, this method is used initially to determine if underlying kidney disease is present. When the thyroid hormone level is brought down back to normal (determined by blood testing), it is important to assess kidney function at this point to determine if the hyperthyroidism was masking underlying kidney failure. This treatment plan is often used before surgery or radioiodine treatment options which are permanent.
2. Surgery (Thyroidectomy): surgical removal of the thyroid gland(s). Two thyroid glands are present, so if one contains a tumor, only the affected side is removed. The procedure will cure benign tumors causing hyperthyroidism. This is a permanent option to cure hyperthyroidism, however if the other gland that was normal at initial surgery becomes tumorous, another surgery to removed that side must be done.
3. Radioactive Iodine: administered as an injection. Radioactive iodine is administered and only affects the abnormal thyroid tissue, leaving normal thyroid hormone producing tissue. This treatment option is not commonly available due to the need for special equipment, radiation safety regulations and radiation safety laws. The cure rate for cats is 90-95%. A small number of patients will need a follow-up injection.

### **Prognosis:**

Uncomplicated hyperthyroidism has an excellent prognosis. It is critical that the cats be treated to improve quality of life, improve overall health, and to diminish the chances of long-term blindness and heart disease.