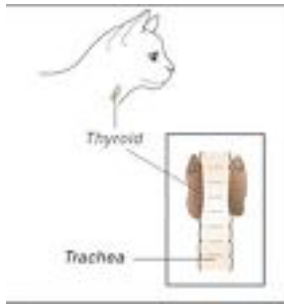


Feline Hyperthyroidism



Hyperthyroidism is a very common illness that affects older cats. It is caused by a benign tumor of the thyroid gland that is similar to goiter in humans 98 to 99% of the time that releases an excessive amount of thyroid hormone into the bloodstream. The median age of diagnosis in cats is 13 years of age. Signs are variable from cat to cat.

The following signs are listed from most common to least common:

- Weight loss
- Hyperactivity
- Increased hunger due to increased metabolic rate and demand for energy utilization
- Increased heart rate due to catecholamine effects of thyroxine
- Increased drinking and urination due to diuresis caused by thyroxine
- Heart murmurs and other heart problems such as arrhythmia, congestive heart failure
- Vomiting
- Diarrhea
- Increased fecal volume
- Decreased appetite
- Breathing problems such as panting and difficulty breathing, and respiratory arrest in extreme cases
- Tremors

The majority of hyperthyroid cats have high blood pressure. If left untreated hyperthyroidism can lead to kidney disease, liver disease, and congestive heart problems. Hyperthyroid cats are also increased anesthetic risks.

Diagnosis is achieved by measuring the thyroid level in the blood. It is a quick blood draw and is sent to a laboratory for measurement. Results typically take 1 to 2 days to return. Occasionally the thyroid level is normal even though the cat is truly hyperthyroid. This can occur due to fluctuations of thyroid levels early in the disease or it can be due to other illnesses that falsely lowers the thyroid. If the cat is suspect hyperthyroid but the thyroid level is normal, additional tests can be done.

Treatment

Methimazole

The most common treatment used is methimazole which is a medication that inhibits the thyroid gland from producing excessive thyroid hormone. It works well but occasionally can have side effects. The most common side effects are a decreased appetite, vomiting, and diarrhea. Rare, but more serious side effects include decreased blood cell production and liver failure. Blood work should be done approximately at 1 month and 3 months and then every 6 months to check the blood cell count, thyroid level, and kidney toxins.



Thyroidectomy

A thyroidectomy is a surgical procedure that involves removing the affected thyroid gland(s). Methimazole must be used 2 to 4 weeks beforehand to decrease anesthetic risk. Hyperthyroid cats are more at risk for anesthetic complications if their hyperthyroidism is not controlled. After removal of the thyroid glands a low blood calcium may occur due to damage of the adjacent parathyroid gland. That can continue for 1 to 40 days after the surgery and if that happens the cat should be kept at the vet clinic and given calcium injections. Thyroid supplementation due to a thyroid level that is now too low may be needed for 2 to 3 months after the surgery, but rarely needed life long. Another complication that can occur after surgery is laryngeal paralysis.

Radioactive iodine therapy (I131)

I131 treatment destroys the hyper-functioning thyroid tissue without affecting the normal part of the thyroid gland. It is almost always successful. Anesthesia and medications are not needed beforehand and it has lowest incidence of side effects in comparison to the other treatments if the kidney values are normal. It is however expensive and the cat may need to be hospitalized for 1 to 2 weeks. It also can accelerate kidney damage if the cat has preexisting kidney disease.