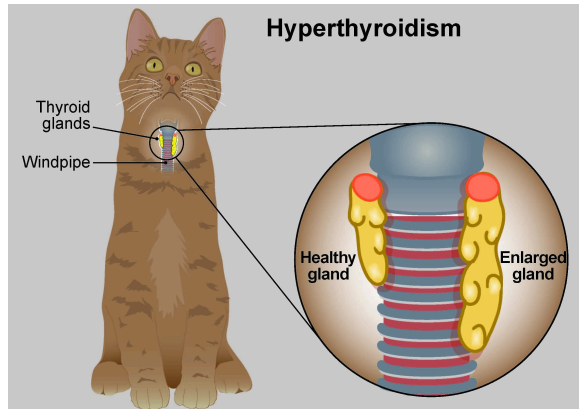




Hyperthyroidism

One of the most common hormonal diseases in cats



What is hyperthyroidism?

Hyperthyroidism is characterized by the overproduction of thyroid hormone, resulting in an increase in metabolic rate. This disease is common in older cats.

Although the thyroid gland enlarges in hyperthyroidism, it is usually a benign or non-malignant change. Only 1-2% of hyperthyroid cases in cats involve malignant (cancerous) thyroid gland tumors.

Many organs are affected by hyperthyroidism, especially the heart.

Signs + Symptoms:

- Weight loss
- Increased appetite - "ravenous"
- Diarrhea
- Vomiting
- Increased thirst
- Poor skin and coat condition
- Hyperactivity

Diagnosis

Diagnosis of feline hyperthyroidism is generally straightforward. The first step is determining the blood level of one of the thyroid hormones called total thyroxine (TT4). Usually, the TT4 level is so high that there is no question about the diagnosis. Occasionally, a cat suspected of

having hyperthyroidism has a TT4 level within the upper range of normal. When this occurs, a second test, usually a free T4 by equilibrium dialysis (FT4 by ED) or a T3 suppression test, is performed. If these tests are not diagnostic, a thyroid scan (thyroid scintigraphy) can be performed at a veterinary referral center, or the TT4 can be measured again in a few weeks.

Treatment + Management

There are a few options for the treatment of thyroid disease in cats.

1. **Daily medication:** Cats are given Methimazole twice daily to achieve normal thyroid levels. Methimazole usually comes as a tablet, but it can be compounded into an oral liquid or transdermal gel if needed.
 2. **Radioactive Iodine Therapy:** When an injection of radioactive iodine is given, it destroys the abnormal thyroid tissue without endangering other organs. I-131 therapy does not require anesthesia and eliminates the need for daily medication. Treatment usually requires 1 or 2 weeks of hospitalization at a veterinary hospital licensed to administer radiation therapy; this is necessary because their urine will contain radioactive iodine, and it must be collected for safe disposal.
 3. **Surgery:** Surgical removal of the affected thyroid gland(s) may be very effective. Since hyperthyroid cats are usually over 8 years of age, there is a degree of risk involved. Some hyperthyroid cats have thyroid cells in abnormal locations called ectopic thyroid tissue (thyroid tissue under the tongue, further down the neck, or all the way to the base of the heart), and they may remain hyperthyroid after surgery. It is best to perform a nuclear scan before surgery to rule out ectopic thyroid tissue. Methimazole is also given before surgery to determine if the cat has a secondary medical condition, such as kidney or liver disease, masked by hyperthyroidism. Another TT4 level is measured 1 to 2 weeks after surgery.
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