

HYPERTHYROIDISM

Hyperthyroidism is a disease in cats that results from over-production of thyroid hormone in the body, which causes an increased metabolic rate. Clinical signs are secondary to the cat's inability to meet the increased demand. The disease occurs more frequently in older cats, but there does not appear to be any breed or sex predilection.

SYMPTOMS

Clinical signs can be mild to severe. The first signs that owners typically recognize are related to general appearance and the cat's behavior. Hyperthyroid cats typically show unexplained weight loss despite a good/ravenous appetite, restlessness, and hyperactivity. As the disease progresses, owners might observe an increase in food and water consumption, increased use of the litter box, as well as vomiting and diarrhea. Increased blood pressure may contribute to kidney disease. Severe cases may progress to the point where the cat becomes lethargic, weak, and has difficulty breathing. Other diseases which may mimic these symptoms include diabetes, cancer and organ disease.

DIAGNOSIS

The diagnosis is suspected based upon clinical signs in the cat. In some cats, a large thyroid gland can be felt. Measuring the cat's serum Free T4 levels will confirm the disease. This is done with a blood test. Occasionally, a cat that appears to have the clinical signs of feline hyperthyroidism has normal levels of T4. In these cats, a thyroid scan test is indicated. Additional tests that are indicated for hyperthyroid cats include a complete blood count (CBC), serum chemistry analysis, urinalysis, and a fecal exam.

TREATMENT

Treatment of feline hyperthyroidism is directed at reducing the levels of circulating thyroid hormone. There are three main methods for the treatment. Options include 1) radioactive iodine treatment, 2) medical management, and 3) surgical management.

The method of choice for treating feline hyperthyroidism is to use radioactive iodine¹³¹. The hyperactive thyroid gland selectively absorbs this isotope and is destroyed. Studies have shown that this method is curative in greater than 95% of cats. Medical management consists of administering a medication called *methimazole*. Methimazole works by inhibiting the production of thyroid hormone. Approximately 15% of cats will have side effects with the use of this medication. The last option is surgical removal of the affected tissue. The most common surgical complication is partial removal of the parathyroid gland that is near the thyroid gland. Low calcium levels result from accidental removal of the parathyroid gland.

Adequate nutritional support is indicated in recovering animals, but feline hyperthyroidism requires no specific dietary changes.

MONITORING

Follow-up monitoring differs depending on the treatment method. Radioactive iodine¹³¹ requires a thyroid hormone level check at one month and six months post treatment. Kidney values are assessed at the same time. Methimazole treatment requires checking thyroid levels and blood counts every 2-3 weeks for the first 3 months; then every 6-12 months. Full serum chemistries should be checked annually. Surgical treatment requires checking thyroid levels after the first week, the first month, and then every 3-6 months thereafter.

COSTS

Again, prices may vary, depending upon the treatment chosen. For the initial work-up including the examination, blood work, urinalysis, and fecal, expect to pay \$300. If a thyroid scan is required, the cost is approximately \$250. Medical management with methimazole is about \$50 per month. The cost of surgical removal of the gland is approximately \$1,500 to \$1,900. I¹³¹ treatment is currently \$1,000. Follow-up blood tests run from \$75 (for thyroid alone), up to \$160 for thyroid levels, CBC, and serum chemistries.