

Hyperthyroidism in Cats Tara M. Sacramone, DVM

Hyperthyroidism is a relatively common hormonal disorder of older cats, but an extremely uncommon disorder of dogs. The thyroid gland, which is located in the neck, is responsible for the control of metabolism. Hyperthyroidism is usually caused by a process called adenomatous hyperplasia, in which the gland's cells produce too much hormone. In some rare cases, hyperthyroidism can be caused by a functioning malignant tumor.

Since the thyroid gland controls metabolism, hyperthyroidism speeds everything up. The most common complaint of owners of hyperthyroid cats is that the cat is eating more, but losing weight. Other clinical signs can include vomiting, diarrhea, excessive drinking, increased activity, increased vocalization, and troubled breathing. When the cat is examined by a veterinarian s/he can find a palpably large thyroid gland, a fast heart rate, and/or a heart murmur, poor hair coat, and the exact amount of weight loss (if your cat has been to the clinic recently) which can help in diagnosing hyperthyroidism. There are multiple disorders that can cause some or all of these clinical signs and physical exam findings, so the diagnosis has to be confirmed, usually with blood work. Also, since most of these cats are older, they can have multiple disorders at one time. Therefore, usually a complete blood work-up including a CBC (Complete Blood Count), profile, urinalysis, T4 (thyroid hormone level), and sometimes specialized thyroid testing (free T4) is done.

Once a diagnosis is made there are a few treatment options available, as long as your cat is otherwise healthy. Hyperthyroidism tends to be a slowly progressive disorder, although it varies with each individual cat.

One treatment option is surgical removal of the diseased part of the thyroid gland. However, many cats (~70%) are affected in both glands, making surgery difficult. Also, there is a small gland adjacent to the thyroid gland, called the parathyroid gland, which is very important in calcium metabolism and should not be disturbed, so the surgeon should be experienced. Also, some of these cats already have heart disease, which can increase their anesthetic risk.

The second treatment option is a medication called methimazole, usually given 2 to 3 times per day. It tries to slow the production of thyroid hormone, and therefore, slow the progression of the disease. Most cats do very well on the medication; however, some cats can eventually develop problems such as vomiting, diarrhea, loss of appetite, and liver disease. Methimazole is not a cure, and once started, cats generally take it the rest of their lives. It can be given orally or even put into an ointment that is applied to the inside of the ear. Cats on methimazole will also need some monitoring with periodic blood work.

The third treatment option is radioactive iodine, and is considered the treatment of choice. The radioactive iodine is injected into the cat with just one injection and it goes directly to the diseased thyroid cells and kills them. In 98% of cats it is a cure. The problem with this treatment option is that the cat's urine becomes radioactive and therefore the cats are required by federal law to be kept in a lead-lined facility for 5 to 9 days after their treatment. Most veterinary hospitals do not have the proper facilities. Another potential downside is cost. However, over time the methimazole, and monitoring can reach or exceed the cost of radioactive iodine.

Currently there are three facilities in Massachusetts that offer radioactive iodine therapy. Their names and locations are listed below.

1. Raiocat in Waltham, MA
(800) 323-9729 www.raiocat.com
2. Angell Memorial in Boston, MA
(617) 522-7282 www.angell.org
3. Thyrocat at Tufts VETS in Walpole, MA
(866) 467-8228 www.thyrocat.com