

Yes, overproduction of hormones by the thyroid glands in cats results in a disease called hyperthyroidism. In the majority of cats, the problem is secondary to a benign enlargement of the glands. Rarely thyroid cancer is the cause. Hyperthyroidism most commonly affects cats over 7 years of age.

Hyperthyroidism signs begin gradually. Not all of the signs occur in every cat. Because thyroid hormones increase metabolism, weight loss in spite of a very good appetite, is a common sign. Vomiting and soft stool may also occur and some hyperthyroid cats will drink and urinate more.

Physical examination of your cat may reveal enlarged thyroid glands, an abnormal heart sound (called a murmur or a gallop), and a high blood pressure reading.

A diagnosis of hyperthyroidism is based on blood work. Blood work should always be performed in order to screen for other diseases, such as diabetes or kidney failure, that can also occur in older cats as well as for hyperthyroidism. Additional testing, such as chest x-rays and echocardiography (ultrasound of the heart) may be recommended by your veterinarian.

Thyroid hormone (T4) levels are the most definitive means to diagnose hyperthyroidism and can be checked with a simple blood sample. A high thyroid hormone level along with appropriate clinical signs usually confirms the diagnosis.

The good news is that hyperthyroidism is very treatable. The best treatment option should be individualized for each cat. There are three treatment options: 1) surgical removal of the affected glands, 2) medical treatment with methimazole (also called Tapazole) a medication that blocks the production of thyroid hormone, or 3) radioactive iodine (<sup>131</sup>I) therapy.

Surgical therapy once was the primary treatment. Due to anesthesia risks in the older cat the other two therapies are more commonly used today.

Methimazole is a pill given by mouth. The dose is adjusted based on blood thyroid hormone levels. Proper follow-up and monitoring is important. A newer formulation of methimazole allows the medication to be applied to the inside of the ear as a paste which is then absorbed through the skin. Methimazole is not effective in all cats with hyperthyroidism. Occasionally cats will not tolerate the medication so one of the other treatments may have to be selected.

Radioactive iodine (<sup>131</sup>I) therapy is considered by most to be the best treatment option and is curative in more than 95 percent of hyperthyroid cats. The <sup>131</sup>I is given as a single injection under the skin. It is absorbed by the thyroid glands where it destroys the diseased cells in the gland. Side effects are very rare but in few instances, too much tissue can be affected resulting in hypothyroidism. This treatment is usually performed at specialty hospitals, including OSU, that are licensed to handle the materials. After treatment, cats must remain in the hospital until they clear most of the radioactive material from their system, which is usually 7-10 days.

Radioactive iodine treatment eliminates the need for surgery or the need to give methimazole life-long. With early and proper treatment, cats with hyperthyroidism can lead normal quality lives and have the life expectancies of other older cats.

This column is provided by the faculty of the OSU Veterinary Hospital. The large volume of questions does not allow us to directly respond to specific email questions so please watch for your answer in the column. Email your questions for the column to [dvmoncall@postoffice.cvhs.okstate.edu](mailto:dvmoncall@postoffice.cvhs.okstate.edu) and watch for your answer.

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