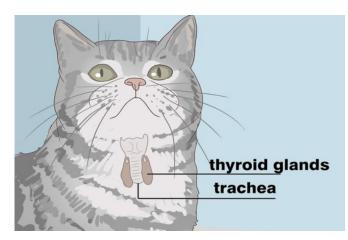
Veterinary Centre Feline Hyperthyroidism



What is Feline Hyperthyroidism?

Feline hyperthyroidism is the most common endocrine disorder in middle-aged and older cats. It occurs in about 10 percent of feline patients over 10 years of age. Hyperthyroidism is a disease caused by an overactive thyroid gland that secretes excess thyroid hormone. Cats typically have two thyroid glands, one gland on each side of the neck. One or both glands may be affected. The excess thyroid hormone causes an overactive metabolism that stresses the heart, digestive tract, and many other organ systems.



If we diagnose your cat with hyperthyroidism, your cat should receive some form of treatment to control the clinical signs.

Many cats that are diagnosed early can be treated very successfully. When hyperthyroidism goes untreated, clinical signs will progress leading to marked weight loss and serious complications due to damage to the cat's heart, kidneys and other organ systems.

Common Statements made by Owners whose Cats may have Hyperthyroidism

"The diet is finally working."

"My cat feels great and is acting like a kitten again."

"My cat is losing weight because it is so much more active."

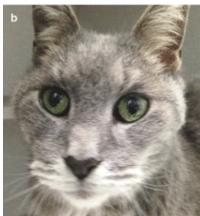
"My cat is starving all the time." "I think my cat is senile."

What are the Clinical Signs of Hyperthyroidism?

If you observe any of the following behaviours or problems in your cat, contact your veterinarian because the information may alert them to the possibility that your cat has hyperthyroidism:

- · Weight loss despite a normal appetite
- Increased urination
- Increased drinking or thirst
- Increased vocalisation
- Restlessness
- Increased activity
- Vomiting
- Diarrhoea
- · Poor hair coat, unkempt fur
- · Sometimes, lethargy and a lack of appetite.





A cat before (a) and while (b) suffering from hyperthyroidism.

Note the weight loss and unkempt hair coat.

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Diagnosis

Twice yearly examinations of your cat may allow early detection of hyperthyroidism, as well as other age related diseases. During the physical examination, your veterinarian may discover increased heart and respiratory rates, hypertension, a palpable thyroid gland, and loss of muscle mass. Routine screening of laboratory tests and blood pressure may detect abnormalities before clinical signs are advanced. Blood testing can reveal elevation of thyroid hormones to establish a diagnosis of hyperthyroidism. Occasionally, additional diagnostics may be required to confirm the diagnosis. Because hyperthyroidism can occur along with other medical conditions, and it affects other organs, a comprehensive screening of your cat's heart, kidneys, and other organ systems is imperative.

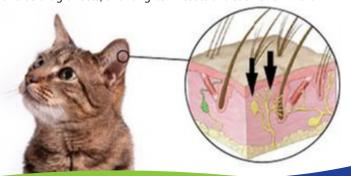
Management and Treatment Options

If your veterinarian diagnoses your cat with hyperthyroidism, he or she will discuss and recommend treatment options for your cat. Four common treatments for feline hyperthyroidism are available and each has advantages and disadvantages. The choice of therapy can depend on factors such as the cat's age, other disease conditions, treatment cost, availability of treatment options, and your veterinarian's recommendation.

Radioactive lodine Therapy – otherwise known as I-131. This treatment consists of administering a small dose of radioactive iodine which only overactive thyroid tissue will absorb. The radiation destroys the abnormal cells while the normal thyroid tissue continues to function. Even though this radiation exposure carries minimal risks for you and your cat, special facilities are required for treatment, and specific isolation protocols need to be followed after discharge. The advantages of I-131 treatment are that it can be curative and there is no anaesthesia, surgery, or risk of drug reaction. It would be necessary to refer your cat to a clinic in Christchurch that offers this service. A centre is also available in Dunedin but this has very long wait times. There is usually a wait list of 4-8 weeks. (Estimated one-off cost of approximately \$800 with follow-up fees for blood tests).

Medical therapy – anti-thyroid medications will control the disease and block the excess production of the thyroid hormone; however because this medication does not cure the disease, your cat must take it for its entire life. Your cat may also receive the drug as a short-term measure, prior to surgery or anaesthesia, or if radioiodine therapy is not available right away. Advantages of medical therapy are a low initial cost, readily available treatment, and no hospitalization.

Disadvantages include the need for medication, potential for adverse drug effects, and long-term costs of treatment. There



are a number of treatment choices that include oral tablets and transdermal ointments that you rub into the cats ear. (Tablets = Estimated cost per month at standard dose: \$35-40 + blood tests (tablets); Transdermal gel = Estimated cost per month at standard dose: \$70 + blood tests (transdermal ointment).

Thyroidectomy – a surgical technique which removes

all or part of the thyroid gland. The advantage of surgery is that it can be curative and eliminate the need for life-long medication. The disadvantages of surgery are that your cat requires general anaesthesia and not all cats are good surgical candidates. Additionally, varying complications of surgery may occur including damage to nerves and blood vessels of the neck, damage to the parathyroid gland function, and recurrence of hyperthyroidism as unrecognised tissue can be left behind by even the best surgeon.

Nutritional therapy – involves feeding a special

diet restricted in iodine content to control the production of thyroid hormones, which may manage some cases of feline hyperthyroidism. Advantages of dietary therapy include low initial costs and ease of treatment. Disadvantages include complicating factors if the cat has other diseases or conditions, takes other medications or supplements, or does not find the taste appealing; also long-term costs of feeding a prescription diet, and the challenges of feeding this diet in multi-cat households. Cats on nutritional therapy should be completely indoors to prevent access to hunted animals or any other food. This is the least effective method of treatment.

A very small percentage of hyperthyroid cats have malignant tumours of the thyroid gland. These cats are more difficult to treat, and the prognosis is difficult to determine.

Monitoring

After starting medication, regular blood tests will initially be required to check that the thyroid levels have come back into a normal range. Once stable, your cat would need to be seen every 3-6 months to ensure that there was adequate disease control.

Adverse Effects of Treatment

Treatment of hyperthyroidism is successful in most cats, but some cats develop kidney insufficiency after treatment, and others can end up with not enough thyroid hormone. If your cat is diagnosed with kidney disease after treatment, it is most likely that your cat had kidney disease before treatment and it just is more obvious after thyroid function and metabolism return to normal. If your cat experiences thyroid hormone deficiency after treatment, you may need to give thyroid hormone supplements to prevent the chronic effects of low thyroid hormone levels. A long-term monitoring program is an important part of the care of your cat regardless of the treatment option you choose.

