

Feline Hyperthyroidism

What is hyperthyroidism?

Hyperthyroidism is a disease of older cats caused by excessive amounts of thyroid hormone production. Thyroid hormone is responsible for controlling metabolic rate, and excessive quantities of the hormone have numerous effects on different body organs including the heart, kidneys, bowel and eye.

What causes hyperthyroidism?

The excessive production of thyroid hormone is usually due to a benign growth on one or both thyroid glands (located in the neck). In <5% cats the growths may be malignant.

What are the signs of hyperthyroidism?

Common signs of the disease include:

- Increased appetite
- Weight loss
- Increased thirst and urination
- Diarrhoea
- Change in behaviour-aggression, vocalisation

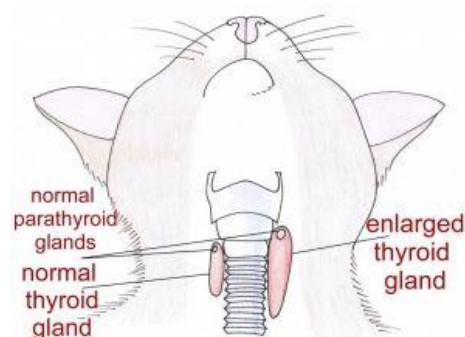
Other signs that may be seen include:

- Breathing difficulties
- Sudden blindness



How is hyperthyroidism diagnosed?

There are many clues suggesting hyperthyroidism that we can detect when we examine your cat and these may include:



- The history you give us
- Feeling a small nodule in the neck region of your cat
- Detection of a heart murmur (abnormal heart sounds) or abnormal heart rhythm
- Identifying evidence of heart failure such as rapid respiratory rate, difficulty breathing or reduced lung sounds
- Identifying high blood pressure or signs associated with high blood pressure such as bleeding or detachment of the retina in the eye.

However, definitive diagnosis of the condition relies on blood and urine testing to confirm the disease, and to exclude other diseases that may present in similar ways. These tests will evaluate:

- T4-thyroid hormone levels. In some cases this may be within the normal range as other illnesses can artificially lower T4 levels and we may recommend repeat testing in 3-4 weeks or a separate blood test.
- Kidney function. Chronic kidney disease is also very common in older cats and may occur concurrently with hyperthyroidism. The presence of kidney disease affects the way hyperthyroidism will be managed in your cat
- Liver function. Commonly elevations of liver enzymes occur in cats with hyperthyroidism.
- Urinary tract health. Cats with dilute urine are at a greater risk for developing urinary tract infections

The most accurate way of identifying and quantifying overactive thyroid tissue is using a specialised test called nuclear scintigraphy, however this is performed only in Sydney at a specialised veterinary practice as it involves the use of radioactive materials and is generally reserved for cases where referral for treatment is sought (see below).

How is hyperthyroidism treated?

Hyperthyroidism is treated in a number of ways:

- Medication: Drugs that block the formation of excessive amounts of thyroid hormone are the most commonly used treatment for the disease. These drugs are generally given orally twice a day, but compounding pharmacists can also manufacture medicated creams that are applied to the ears for difficult cats. They are generally well tolerated by cats, and side effects such as inappetence and vomiting are uncommon. They can be used as a lifelong therapy, or may be used prior to more permanent treatment to assess for negative effect on kidney function.
- Surgery: This is not commonly performed in Australia due to the anaesthetic risk, and risk of affecting the parathyroid gland which is responsible for the control of blood calcium levels.
- Radioactive therapy: A permanent form of therapy for the disease is available which involves destruction of the abnormal cells using radioactive iodine compounds. This procedure has become more widely available and cost effective over the past few years and requires the cat travelling to a specialist hospital in Sydney where they will be treated and hospitalised for one week until it is safe for them to go home. In general, this is a safe method of treatment and highly effective. In rare cases a second dose will be required, or the cat may require supplementation with thyroid hormone. This is not suitable for cats with concurrent kidney disease.
- A new food is also available that can successfully treat the condition, when it is the only diet fed. Like any new food, it should be introduced gradually over 5-7 days to minimise gastrointestinal upsets. The food provides a very restricted iodine level, which means that the abnormal thyroid does not have enough iodine to produce the extra thyroid hormone.



Monitoring

Regardless of the treatment chosen, monitoring is essential and will require blood tests to assess thyroid hormone, kidney and liver function 3-4 weeks after commencing treatment or adjusting dose, and every 3-6 months thereafter. Blood pressure monitoring is also important as high blood pressure is very common in hyperthyroid cats and additional therapy may be required.

What if I don't treat the condition?

The condition is progressive, and failure to identify and treat the disease will result in:

- Progressive weight loss leading to emaciation
- Progressive heart disease resulting in heart failure, breathing difficulties and high blood pressure
- High blood pressure can result in blindness
- Severe diarrhoea

Questions?

If you have further questions about this condition, please feel free to contact us and we would be happy to answer them for you.

My Vets Irrawang
3/17 Port Stephens Street
Raymond Terrace NSW 2324
49871898



My Vets Thornton
3/30 Railway Avenue
Thornton NSW 2322
49661133