



Valentine Charlton Cat Centre Client Information Sheets

Hyperthyroidism in cats

What is hyperthyroidism?

Hyperthyroidism is a common disorder of cats over 8 years of age. It is caused by an increase in production of thyroid hormones from the thyroid glands, which are situated in the neck. Increased thyroid hormone leads to an increased metabolic rate.

Common signs of hyperthyroidism include;

- weight loss
- increased appetite and increased thirst
- increased irritability
- restlessness, panting
- rapid heart rate
- dishevelled coat
- diarrhoea and/or vomiting
- heat intolerance



What causes hyperthyroidism?

In most cases there is a benign (non-cancerous) change in the thyroid glands. The underlying cause of this change is currently unknown. Very rarely, (less than 3 % of cases) thyroid cancer (thyroid adenocarcinoma) can cause these signs.

What tests are required to diagnose hyperthyroidism?

Where hyperthyroidism is suspected, your veterinarian will run a blood test to check thyroxine (T4) levels. In most cats with hyperthyroidism, the T4 is increased. In some cases, the T4 can be normal and your veterinarian will discuss this with you if necessary.

What other tests may hyperthyroid cats need?

Other blood and urine tests are recommended at diagnosis to check for common diseases of elderly cats. These tests help to determine the most appropriate treatment for your cat. It is important that we check kidney function before treatment because both hyperthyroidism and kidney problems are common diseases of older cats. Hyperthyroidism improves poor kidney function by maintaining high blood flow to the kidneys. Treating hyperthyroidism may lead to decreased kidney function if kidney disease is already present. Urine and blood tests help to evaluate kidney function, and some cats may be placed on a medication trial and have their kidney function re-evaluated.

Blood pressure testing is carried out in all older cats. Hypertension (high blood pressure) is a potential complication of hyperthyroidism and can cause damage to several organs including the eyes, kidneys, heart and brain. If hypertension is diagnosed along with hyperthyroidism, drugs may be needed to control the blood pressure.

My cat is old. Is there any point in treating hyperthyroidism?

Cats usually respond very well to treatment. If the condition is recognised early and treated appropriately, then the outlook for the affected cat is generally very good.

What treatments are available for hyperthyroidism?

Oral medication

Anti-thyroid drugs, which reduce thyroid hormone levels. carbimazole or methimazole are available in tablet form. It does not cure the condition but allows either short-term or long-term control of hyperthyroidism. Thyroid hormone concentrations usually fall to within the reference range within 1-2 weeks. For long term management the dose is then adjusted according to response. This medication needs to be given daily for the rest of the cat's life and regular blood tests are required to monitor response to treatment.

Side effects include reduced appetite, vomiting and lethargy. More serious problems, including reduced white blood cell or platelet counts (which help the blood to clot), liver disorders, or skin irritation are rare, but if they do occur then an alternative treatment must be used. If you suspect side effects are occurring, you should stop treatment and contact us.

Transdermal medication

An anti-thyroid medication called methimazole is also available as a gel which is absorbed across the skin. The medication is applied to the inner surface of the ear twice daily. As with the tablets, this medication needs to be administered for the rest of the cat's life. Gloves must be worn while applying the methimazole gel and hands should be washed afterwards as it can be absorbed across human skin as well.

Radioactive iodine therapy

Radioactive iodine is the treatment of choice for hyperthyroid cats whose kidney function is not failing. The radioiodine is administered as an oral capsule, and the iodine is taken up by the abnormal thyroid tissue and destroys it, but does not damage the surrounding tissues. The advantages of radioactive iodine are that it is curative and has no major side-effects. However, it does involve the handling of a radioactive substance. This carries no significant risk for the patient, but precautionary protective measures are required for people who come into close contact with the cat.

A treated cat has to remain hospitalised until the radiation level has fallen to within acceptable limits. This usually takes 7-10 days. Treated cats still excrete a very small amount of radioactive iodine in their faeces and urine after leaving hospital. Precautions need to be taken to limit human exposure to radiation for 2 weeks after discharge. Prolonged close contact should be avoided e.g. if your cat normally sleeps on your bed or sits on your lap for long periods, this should be avoided. Gloves need to be worn when handling the litter tray and the contents of the tray disposed of daily in a sealed bag in the bin. The litter cannot be composted. If these precautions are not possible, cats may board in hospital.

A single dose of radioactive iodine is curative in more than 95 per cent of all hyperthyroid cases, and in the few cats where hyperthyroidism persists, the treatment can be repeated. Occasionally a permanent reduction in thyroid hormone levels (hypothyroidism) occurs following radioactive iodine treatment, and if this is accompanied by clinical signs (lethargy, obesity, poor hair coat) then thyroid hormone supplementation may be required (in the form of daily tablets).

Surgical thyroidectomy

Surgical removal of the thyroid glands may be a treatment option for some cats. Risks include general anaesthesia, damage to the nearby parathyroid glands (involved in blood calcium regulation) and damage to the nearby laryngeal nerves. Approximately 25% of hyperthyroid cats will have some thyroid tissue within the chest which cannot be surgically removed. Scintigraphy is an imaging technique that can be performed before surgery to see if this is present. Thyroidectomy is not performed routinely at the UVTHS because we have access to the gold standard therapy of radioiodine. However, there may be special circumstances where we recommend a surgical biopsy or surgical removal of one or both thyroid glands.

Low iodine diet

Recently a low iodine diet, Hills y/d, has become available. Similar to anti-thyroid drugs, this treatment may reduce thyroid hormone levels but not cure the condition and takes 1-2 months to be effective. Cats on this diet must not be given any other food, treats or iodine containing medications. The diet must be continued for the rest of the cat's life and regular blood tests are required to monitor response to treatment.

Please do not hesitate to contact us on (02) 9351 3437 if you have any queries or concerns regarding your cat.

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