

January 2025

Radioiodine Treatment Information Sheet

What is Hyperthyroidism?

Hyperthyroidism is a disease caused by excess amounts of circulating thyroid hormone in the bloodstream. This is a common medical condition in middle-aged to geriatric cats, and it usually results from one or more benign tumors (adenoma or adenomatous hyperplasia) of the thyroid gland. Carcinoma (malignant cancer) is a very rare cause of hyperthyroidism in cats, at least in the initial stages of the disease.

Excess thyroid hormone accelerates most bodily processes and gradually causes the clinical signs that are apparent to most owners.

The most consistent finding is weight loss secondary to the hyperthyroid cat's increased rate of metabolism. Most cats try to compensate for their weight loss and increased rate of metabolism by eating more (increased appetite).

In fact, some of these cats have a ravenous appetite and will eat literally anything in sight! However, despite the increased food intake, most cats lose weight. While the weight loss may happen quickly, it may also be so gradual that some owners will not even realize it has occurred. Other signs of hyperthyroidism may include anxiety or nervousness, a rapid, pounding heart rate, muscle weakness, vomiting, diarrhea, increased thirst or urination, heat intolerance (panting), and an unkempt hair coat.

Over time, untreated or poorly controlled hyperthyroidism leads to deleterious effects on many of the cat's internal organs. Heart failure, kidney and liver disease, muscle wasting, chronic emaciation, and/or severe metabolic dysfunction can develop, ultimately leading to death.

How is Hyperthyroidism treated?

Hyperthyroidism can be treated medically, surgically, by life-long feeding of an iodine deficient diet, or with radioiodine.

Medical treatment consists of administering methimazole (Felimazole or Thyronorm) one to three times per day. Methimazole treatment usually controls the signs of hyperthyroidism, but it is not a cure. The drug must be given for the rest of the cat's life, and it is very difficult to maintain serum thyroid hormone values within the normal range over many months.

Feeding a low iodine diet can work to lower thyroid hormone values but does not destroy the thyroid tumor. In addition, the commercially available iodine deficient diet (y/d) is not very

palatable and is relatively low in protein content, especially for the cat—a carnivore with high protein needs.

Surgery cures the hyperthyroid condition by removing part or all of the thyroid gland. Obviously, this requires anesthesia, and postoperative complications are not uncommon.

Radioiodine (radioactive iodine; I-131) also cures hyperthyroidism. The procedure for this treatment is simple; just one injection of Radioiodine safely destroys all cancerous thyroid tissue wherever it occurs in 95-98% of cases.

Radioiodine treatment is the administration of a radioactive iodine solution which is given simply as a single subcutaneous injection in just the same way as your cat gets its annual vaccination.

The radioactivity in the injection is preferentially taken up by the cancerous thyroid glands in the neck and any other cancerous thyroid tissue that may exist anywhere else in the body - it is not unusual to get some cancerous thyroid cells in the chest for example. This then effects a complete cure in approximately 95 - 98% of cats.

What are the advantages of radioiodine treatment over surgery or medical management?

It is the only treatment that consistently removes all cancerous thyroid cells no matter where they are in the body.

There are no significantly harmful side effects

No daily tableting

No anaesthesia

No post-operative complications

It is more cost effective over the lifetime of your cat

What needs to be done before Radioiodine Treatment?

Your cat must have a high T4 on a sample sent to an external lab.

Your cat's general health must be good. During the time that your cat is with us, we are not able to handle him or her very much because of the radioactivity. We are not able to groom cats and while their tablets may be placed in food, they cannot be given directly. We do not want cats to become unwell when they are with us because we cannot treat them without exposing our veterinary staff to high levels of radioactivity.

Therefore, if your cat has significant medical problems, other than hyperthyroidism, he or she may not be suitable for this treatment.

Medivet Godstone Referrals, Godstone Highway Depot, Oxted Road, Godstone, RH9 8BP
Tel: 01883 744 812 | Email: referrals.godstone@medivet.co.uk

Your vet will send all blood and urine test results to us prior to your appointment. We will review those tests and depending on the results we may repeat all, or some, if we feel it necessary.

Assessing renal function is particularly important at this stage. Hyperthyroidism boosts the metabolism and can hide problems such as kidney failure. We will also be checking for common complications of hyperthyroidism, such as high blood pressure or significant heart disease. So your cat will get a full “Geriatric MOT” if you like!

You need to stop all anti-thyroid medication or diet, 10-14 days before your appointment for radioiodine treatment. Your cat must also be up to date with cat flu vaccinations.

What does the treatment cost?

The treatment cost is £3069.99 including VAT. A deposit of £500 is required at the time of booking. This is a non-refundable deposit, unless a cancellation or postponement is made two or more weeks before the treatment date, or the patient is deemed not suitable for radioiodine therapy.

The cost includes:

- Full assessment 3-4 weeks before the injection day

- Blood test (biochemistry, SDMA, T4), BP check

- Cat admission appointment

- Radioiodine treatment

- Hospitalisation for up to 10 days

- Ongoing advice as further blood test become available 1,3 and 6 months after treatment

The cost excludes (if required):

- Additional X-rays

- Echocardiography (Heart Scan)

- Emergency medical tests, procedures or medications needed during hospitalisation

In addition, any treatment or tests such as T4 and other tests, for example at your own vet, are not covered and will need to be paid for separately.

- Hospitalisation longer than 10 days

When can I visit and when can I take my cat home?

Unfortunately, you will not be allowed to visit your cat during their stay in the radioiodine ward. This is to protect you during that period when the radiation levels are relatively high. Strict Ionising Radiation Regulations will not permit such visits.

We strive to have your pet home with you as soon as possible and this will be when the level of radiation decreases to a level safe enough to be allowed home. This can vary somewhat from one cat to another, but we expect a period of roughly 10 days.

Before your pet is sent home, you will be required to sign a form which explains how you need to manage your pet once released.

The conditions include:

Your pet must be kept indoors, ideally in an unoccupied room, and must use a litter-tray for approximately two weeks.

You will ensure that children and/or pregnant females will not be allowed near your pet or the litter tray.

You will ensure that you do not spend large amounts of time cuddling or petting your cat for approximately one week - as a guide, less than one hour per day.

You must wear rubber gloves when handling your cat's litter tray and waste. The waste should be double bagged and stored for one month before being put out for collection by your local council collectors. This should be stored in a secure outside storage area (garage or shed) in a suitable container with a secure lid.

What happens after I take my cat home?

You will need to visit your own vet 4 weeks after your cat is discharged from us, to check the blood pressure and kidney function. If all is normal at this exam, then you only need to have your cat checked every 3-6 months thereafter at your own vet.

For those uncommon cases that are not completely cured by 6 months post treatment (remember the success rate is 95-98%), we will treat them a second time for a reduced cost.

Rarely, cats can develop hypothyroidism - this is usually easily managed with medication.

We hope you have found this information useful please do not hesitate to contact us on 01883 744812 should you have any further questions.