

Hyperthyroidism in cats



Your cat has been placed on a waiting list at the WCVM Veterinary Medical Centre to receive radioactive iodine treatment for hyperthyroidism. To help prepare you for your cat's trip and treatment, here are some of the most common questions that are asked about the WCVM's treatment program.

Q. When will my cat be treated?

Your name has been placed on our waiting list and you have been told an approximate date for treatment. We generally have a waiting list of from one to three months. The WCVM Veterinary Medical Centre is one of the only Canadian facilities offering radioactive iodine treatment for hyperthyroidism and as our treatment ward has a small capacity of only five cats, we may be unable to treat your cat immediately.

Q. What arrangements will I need to make?

A WCVM receptionist will call you approximately two weeks before anticipated treatment to give you a date when clinicians would like to have your cat arrive at the hospital. The receptionist will give you directions if you are travelling by car and assist you in making flight arrangements if your cat will arrive by airplane. The WCVM Veterinary Medical Centre has a very reliable courier service which will transport cats between the Saskatoon airport and the medical centre for treatment.

Q. Should my cat be tranquilized for travel?

Some very nervous cats should be sedated before a plane ride or long car trip to Saskatoon. This should be decided on an individual basis by your veterinarian. The drugs which we use most often for this purpose in hyperthyroid cats are phenobarbital and diazepam.

Q. My cat is on medication to control hyperthyroidism. Can he/she still be treated with radioactive iodine?

Recent studies show that this medication does not interfere with the radioactive iodine treatment. If your veterinarian has prescribed anti-thyroid drugs like methimazole (Tapazole), continue to give it to your cat as directed. We will discontinue the anti-thyroid medications on the day that your cat is admitted to our hospital.

Q. What will be done to my cat at the Veterinary Medical Centre?

When your cat arrives at the college, it will be welcomed, examined and placed in a comfortable cage with fresh food and water. We will then call you to let you know that your pet has arrived safely. The next two or three days will be spent doing some tests to be certain that:

- your cat has hyperthyroidism
- is free from other serious disease
- will benefit from therapy

Our clinicians will conduct blood tests, urine tests, chest X-rays, an ECG, and perhaps a heart ultrasound examination. If everything is as it should be, your cat will be scheduled for treatment three to five days after arrival at the WCVM Veterinary Medical Centre.

Clinicians require that your cat be at the WCVM Veterinary Medical Centre for tests during the first two to three days. As well, it is very important for your cat to stay in the hospital for a few days before treatment so the clinical team can assess how well your cat will settle down and eat for us.

Q. Is it possible that my cat is not a good candidate for treatment?

Our aim of treatment is to make your cat feel better and have a longer, happier life. We can cure hyperthyroidism, so if your cat's symptoms are due to hyperthyroidism, the chances are that treatment will be successful.

If your cat has some other disease or a malignant (non-thyroid) cancer, we may be unable to make your cat feel better by treating its hyperthyroidism and your cat may therefore not be a good candidate for treatment. If our screening tests

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suggest that your cat is not a good candidate for radioactive iodine treatment, we will send your pet home to you.

Some of our tests will be directed at assessing the health of your cat's heart. Hyperthyroidism can have very serious cardiac consequences and sometimes it is important to treat the heart specifically, as well as treating the hyperthyroidism.

Hyperthyroid cats have increased blood flow to their kidneys. When we successfully treat their hyperthyroidism, no matter which treatment we use, this abnormally increased blood flow returns to normal. When we treat hyperthyroidism in cats with concurrent kidney disease, we often see a noticeable deterioration in their kidney function and some cats may actually develop symptoms of kidney failure.

For this reason, whenever our physical examination findings or lab tests make us suspicious of kidney disease in a hyperthyroid cat that has been referred for radioiodine treatment, we recommend that the cat's hyperthyroidism be treated first with reversible anti-thyroid drugs (methimazole) for a few months. This will allow us to determine the extent to which kidney function will be compromised in your cat when we treat the hyperthyroidism with a permanent treatment such as radioactive iodine.

Q. What does the treatment involve?

One morning your cat will be moved to our treatment ward. This is a small ward in the same building as our Small Animal Clinic but it is separate from the clinic. Cats will be individually housed in large cages in this nice, quiet room and will have no contact with other cats during their hospitalization. Radiation safety regulations prohibit us from allowing owners and untrained students or staff to visit the room before or after treatment.

Your cat will receive a small, precise volume of radioactive iodine under the skin in the early afternoon. This injection is not painful and the entire treatment takes less than five minutes. There is no pain or anxiety associated with the treatment. We have not noticed any side effects in the cats treated in this manner.

Q. How long will my cat have to stay at the hospital?

Most cats stay at our hospital approximately 12 to 14 days. This includes three to four days before treatment and approximately 10 days after treatment. Radiation safety regulations mandate that we must keep cats until their level of radioactivity reaches an acceptable level.

We will use a Geiger counter to measure the amount of radioactivity left within your cat beginning seven days after treatment with radioactive iodine. Once the degree of radioactivity measured over the thyroid gland has diminished to a certain level, we know that there is no longer any radioactive iodine being excreted in the urine or saliva so exposure to the cat should pose no risk to humans or other pets.

Q. How will I know how my cat is doing?

Initially, while your cat is in the regular ward, a small animal medicine student assigned to the case will call daily or every other day to update you. You will be called on the day of treatment and then every five or six days by the student who works in the hyperthyroid cat ward.

Rest assured that we will also call you immediately if your cat encounters any problems while at the college. Please be sure that your work and home telephone numbers are correct and current upon your cat's admission to the hospital. Also, when the student from the hyperthyroid ward calls you the first time, try to let them know the best times and days to reach you.

Q. Who will take care of my cat?

We have several advanced veterinary students who have a special interest in old cats and have been hired to work in the ward. They do the feeding, cage cleaning, cuddling and grooming of your cat each day as well as administering any medication which is needed. In addition, a veterinarian will visit with the cats each day to play with them and examine any that are having problems.

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Q. What will my cat be fed?

We normally feed a wide variety of canned and dry foods. If your cat has specific likes and dislikes or dietary needs, please let us know and perhaps send some food along with your cat.

Q. Can I send my cat's favourite toys, a blanket or an article of my clothing?

You are welcome to send any items along that you feel would make your cat's stay more pleasant. But unfortunately, we can not return anything that we put in the hyperthyroid cat ward with your cat due to the problem with radioactivity and regulations established by the radiation safety office.

Q. When my cat is ready to come home, what do I do?

You will get a phone call from the veterinary student who cares for your cat or from our front desk staff regarding arrangements to send your cat home. If you are driving, we will set up a date and approximate time.

If your cat is to return by airplane, you will need to book a convenient flight and inform us of the date, flight number, waybill number and the time that your cat will depart. We will contact our courier to ensure your cat is at the airport in a timely fashion.

Q. What is the cost and how will I pay?

The WCVM Veterinary Medical Centre prices hyperthyroid treatments on cats on a break-even basis. To receive an estimate for the approximate cost of treatment (without complications), contact the Small Animal Clinic (306-966-7126).

If your cat has other concurrent problems (such as diabetes or heart failure) which require intensive therapy, the bill may be a little higher. Courier charges to and from the airport are not included in the estimate. We ask that you give us a credit card number (VISA or MasterCard) for payment of a \$1,300 deposit as well as the remaining charges at the time of discharge.

Q. Will I need to take any precautions once my cat is home?

Your cat will not be discharged from our hospital until there is no risk of exposure to radioactive urine and saliva.

We still suggest that for 10 days, please do the following:

- confine your cat to your house
- clean the litter box while wearing gloves
- do not allow the cat to sleep in bed with you

Other close contact is permitted. There is no risk to other pets in the household. If there is a pregnant woman in the household, we often recommend that we keep the cat at the WCVM medical centre for an additional seven days just to ensure absolute safety.

Q. How successful is this treatment?

Greater than 90 per cent of cats treated with radioactive iodine will be cured by a single dose. Your veterinarian should take a blood sample about one month after your cat returns home to confirm that treatment has been successful and to evaluate kidney function. We would like a copy of that result sent to us for our records.

A small percentage of cats will not respond completely to this treatment. They will feel better and symptoms may disappear, but the thyroid hormone level is still high and these cats will relapse within months. Reasons for failure to respond to the initial treatment may include a very large thyroid mass or the presence of a malignant thyroid tumour instead of a benign one. These cats may be cured by a second treatment of a very high dose of radioactive iodine.

A few cats will become hypothyroid after treatment. These cats for some reason respond more completely to the low dose of iodine than is desirable. This is usually not an important clinical problem. Occasionally, however, there will be clinical signs such as weight gain, sluggishness and poor hair coat requiring treatment with thyroid hormone replacement (pills) — a drug therapy that may be required for the rest of your cat's life.

For more information, contact:

Small Animal Clinic
WCVM Veterinary Medical Centre
306-966-7126