

Check List for Radioactive Iodine (I-131) Treatment for Your Kitty

- **Call for information / book your appointment**
 - Consult appointments are booked ahead of time to discuss radioactive iodine and decide if that treatment is appropriate. A drop off at a later date is then arranged. Your cat does not need to be off medication for these.
 - I-131 Admit appointments are made so that we admit for the radioactive iodine treatment right from that appointment. They should be off Methimazole or y/d (see below).

At either type of appointment we will discuss the treatment and options for restrictions post treatment.

- **Information packet** – It will be sent to you at the time you make the appointment or if you call and request it. **Please read it as many of the questions are answered and if you have others feel free to contact us.
- Have your veterinarian **send records** over to Angell, fax: (617) 989-1657
- Your cat will need to be **off methimazole** at least 1 week prior to the treatment day. ***Please consult with your veterinarian before just stopping, especially:
 - If your cat is on high doses of methimazole.
 - If your cat has a high heart rate. Meds to slow heart rate may be needed.
- **Stop all supplements or y/d diet** 2 weeks prior to treatment. If on other medications check with your veterinarian to see if they should be stopped. When in doubt, check with us.
- **Pack their “Go Bag” for the day of admission:**
 - **Food** – (if not Science Diet), treats, etc. enough for the whole stay so we can limit GI upset by keeping their diet consistent.
 - **Something that smells like home** (old shirt, towel) and toys (just not their favorite ones since we can't give them back. This makes them comfortable.

Morning of the appointment:

- Do not feed a large breakfast, a few treats are fine. This gives us better x-rays and allows us to bond with your cat using food. (I am not above bribery at all. 😊)

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AMAH I-131 PROGRAM: Information for Clients

FELINE HYPERTHYROIDISM

- Feline hyperthyroidism is caused by a tumor of the thyroid gland (98% are benign). These tumors produce large amounts of thyroid hormone in the body. Excess thyroid hormone causes an increased metabolic rate and is responsible for many of the signs we see such as weight loss, increased appetites, elevated heart rate, heart murmurs and arrhythmias.

HOW RADIOIODINE (I-131) THERAPY WORKS:

- The goal in treating hyperthyroidism from the benign tumors is to destroy only the tumor cells in the thyroid and spare the normal thyroid cells. Ideally this should result in normal thyroid hormone levels and correction of weight loss and other clinical signs. For most cats, there is no need for daily thyroid medication after I-131 treatment. The goal in treating the uncommon, thyroid adenocarcinoma is to destroy all the thyroid tissue. After treatment, these patients will need daily thyroid supplementation for life.
- Normally the thyroid glands take up iodine to be made into thyroid hormone. In hyperthyroid cats the high amount of thyroid hormone in the body causes normal thyroid cells shut down (they call this negative feedback). This spares these normal cells from the effects of the radiation. Tumor cells do not have this feedback so when given the radioactive iodine, the tumor cells pick that up as they would normal iodine. The radioactive iodine is taken into the tumor cells and while it is in the cells, it kills the tumor cells.
- Once the thyroid tumor cells are destroyed, the remainder of the thyroid tissue should perform normally again.
- The success rate of I-131 is approximately 95-98%. A few patients may require an additional treatment with I-131 if they do not return to normal thyroid function within 3-6 months. A small percentage of cats will become hypothyroid (not produce enough thyroid hormone) and if this occurs, may be a temporary problem, or in some cats (~5%) these cats may require thyroid supplementation.

ABOUT OUR PROGRAM

- Your cat will be carefully screened for other disease conditions before being admitted for radioiodine treatment. The screening will consist of bloodwork, urinalysis, radiographs (x-rays), and possibly additional tests such as ultrasound of the heart or abdomen. Often this is done by your veterinarian before your cat is referred for treatment.

COST OF TREATMENT IS ~\$2350-2400

- This will vary slightly depending upon tests needing to be done at Angell.
- A full estimate will be given at the first appointment.

BEFORE THE TREATMENT

- Dr. Duddy must examine your cat on or before the scheduled admission date. At that time it will be determined if your cat is suitable for this treatment, and any necessary additional testing will be arranged. Scheduling is done through the call center at **(617) 522-7282**.

- If your cat is on antithyroid medication such as Methimazole, **this must be discontinued at least one week before your cat's scheduled admission date for treatment. Please consult your veterinarian about stopping the medication.**

A-WARD: YOUR CAT'S HOME AWAY FROM HOME

- During our appointment we will show you slides of the ward and you will get pictures of your kitty often.
- The I-131 ward is a limited access ward staffed by personnel trained to work with radioactive materials. Your cat will be in a comfortable cage away from noise and dogs. We provide toys for distraction. We highly encourage you to leave an old towel, shirt or some toys with the scent from home. But don't bring any favorites as they cannot be returned to you.
- We try to mimic feeding time at home. You can make a list of their daily routine and give it to us at the time of admission. For this reason, we also recommend you bring some of your cat's food so we change diets as little as possible. Hopefully minimizing the chance of an upset stomach. And we all know how much kitties like their own special flavors. Let us know of any dietary allergies, likes or dislikes.
- At night, the lights are lowered to allow your cat to have normal sleep cycles.
- The ward has a high flow ventilation system to avoid spread of upper respiratory infections. We all worry about this when kitties are in the hospital.

HOSPITALIZATION DURING AND POST I-131 TREATMENT

- Length of hospitalization varies from 4-5 days (home with restrictions) to 18–19 days (if your cat boards post treatment for all of the home restrictions to be completed).
 - Cats come in 1–2 days before treatment to become acclimated and finish testing.
 - Massachusetts requires 17 days post treatment for all restrictions to be up. Please note: We cannot change that date (17 days post treatment).
- Once the I-131 treatment is administered (by injection) your cat cannot be released any earlier than 3 days post-treatment under any circumstances.
 - No visitation is permitted due to radiation safety concerns, but you will be contacted once a day with a progress report. And when possible we will send out pictures for you. If you haven't gotten a report, feel free to call our call center for an update (617) 522-7282 or e-mail us, you will be given all of our contact info at the admission time. We always want you to have access to updates.

RESTRICTIONS AND RELEASE OPTIONS POST I-131 TREATMENT

- AMAH offers the flexibility of variable release dates.
- **Early Release** – 3 days post treatment (we scan and treat on Wednesday so cats can go home on Saturday once they have been monitored with the Geiger Counter to be sure their radiation levels are below the allowable limit). The nuclear medicine technician will confirm that your cat is ready to go home on Saturday morning.
- **Boarding until no litter restrictions** – While here we will monitor amount of radiation coming off of the urine. Once it is below allowable limits – litter does not need to be handled with special instructions (see restriction sheet). This is most commonly around day 10–14 post treatment but can vary as it is based on the cat's own metabolism. But we keep you posted about this.
- **Boarding until no restrictions** – After 17 days post treatment, all restrictions are done and you and your cat can resume your normal lifestyle.

All of these options are discussed at the appointment time with Dr. Duddy.

I-131 Treatment daily schedule once admitted:

Your cat has just been admitted to the I-131 program here at Angell Memorial Animal Hospital. This document will give you some information on what to expect during treatment.

Monday/Tuesday:

Monday Appointment for admit is for cats never seen by Dr. Duddy before – we have an appointment for an exam and discussion of radioactive iodine treatment and restrictions. Your cat is admitted from this appointment.

Monday/Tuesday Drop off for cats previously seen by Dr. Duddy. You can bring your cat in

Monday, 7:00am – 4:00pm

Tuesday by 10:00am

***If you cannot make these times, please notify Dr. Duddy.

First two days of admission. If needed repeat blood tests and x-rays are done. This is to be sure nothing has changed since your veterinarian did the tests. We are trying to make sure your cat is as healthy as possible. We will talk about results of the tests before we continue with the radioactive iodine treatment. We want you to feel comfortable that this is the best treatment option for your cat. We have Tuesday to do any additional testing that would be needed if something abnormal showed up on our screening tests. Otherwise Tuesday is a day for kitties to acclimate to the ward and us!

Wednesday: A thyroid scan (also called a technicium-99 scan) is done to determine if one or both lobes of the thyroid gland are involved. If your cat is too difficult to handle, a tranquilizer may be given. After all the information has been gathered, a dose of radioactive iodine (I-131) is determined and then administered as one injection on Wednesday afternoon.

Thursday onward: From this point on, your cat is boarding here as the amount of radiation decreases. All we expect is for your cat to relax and eat. As we discussed, we try to provide all the comforts of home and we try to feed their normal diet. You can also provide a voice recording (e-mail us or even drop off a cassette tape), and we will play it for your cat. If your cat has any music preferences for our radio, let us know!

While your cat is here during the treatment, full physical exams are not done daily due to radiation exposure and this is a locked ward. All cats are observed at least three times daily and all appetite, bowel movements, etc are recorded. If you have any questions about this please feel free to ask.

The technicians usually update you daily if all is going well (they send pictures so most people would rather hear from them). I check in every few days just to say ‘hi’ so don’t worry if you hear my voice on the phone. But if anything is going on, I will be on the phone with you. You can also feel free to email me with questions anytime.

Discharge and Home Restrictions:

Saturday:

After cleaning and feeding, we monitor the cats with the Geiger counter. Those cats going home for early release will be notified by the technician as soon as they are finished (usually by 10am).

- If you would like your kitty not to be fed the day of discharge, (car sickness), let us know ahead of time.
- If your cat requires medication for travel, please let us know ahead of time.
- A discharge time will be set up at that time of the morning call to minimize your wait time.

Those kitties staying with us will get daily updates as usual.

All dates and restrictions are discussed at the time of the appointment and if any questions please let us know.

Admission and Restriction Instructions sheets:

The last sheet is a copy of the restriction form everyone signs (even if your cat is staying the whole time) on admission. That is so we know you have been told there are restrictions if you take your cat home before the restriction period is finished.

- At the time of discharge this restriction sheet will be part of your discharge instructions. This safety precaution instruction sheet just like the one attached below.
- **It is imperative that you follow the restrictions as indicated both for your own safety and to avoid problems at your local trash processing facility.**
 - If you dispose of any contaminated litter in your trash can during the 2-week restriction period, Geiger counters at the trash disposal facility will likely detect it. This has resulted in costly expenditures of labor for cities and towns necessitated by locating the source. Fines have been issued to people improperly disposing of radioactive cat litter.

I-131 Home Kit Information

If you are taking your cat home prior to 17 days post treatment. You may need flushable litter. We will discuss this and other options at the time of the appointment.

1. **Flushable litter** – Check local pet supply stores for availability prior to release
 - Brands include:
 - World's Best Litter has a few types
 - Oko Cat Litter
 - Cat's Pride has a few types
 - Natures Miracle
 - Wheat Scoop
 - And many others
2. **Plastic (rubber) gloves**
3. **Plastic bags** – If you cannot flush litter, we can discuss storing the litter for 3 months before disposal into the trash facilities.

Safety Precautions Following I-131 Hyperthyroid Therapy

After receiving I-131 therapy, your cat will contain residual radioactivity which is excreted primarily via urine and feces. To justify early release of your cat, you must agree to follow these **safety precautions for 2 weeks** or as otherwise indicated.

1. Use a plastic liner in the litter box before adding litter, or use a box that will be dedicated to this 2-week period and then isolated for 3 months before disposal. Keep box out of occupied bedrooms, kitchen, and away from unsupervised animals and children. Wear dedicated rubber gloves when removing soiled litter from box (use gloves only for this purpose; segregate for future use).
2. Use **flushable litter only** in box. For the 2-week period, dispose of soiled litter into toilet and flush. **(Do not discard litter via normal trash for this 2-week period).**
3. If your cat vomits or soils outside the litter box, wear your special gloves and use normal cleaning procedures with toilet paper or flushable tissue. Flush all such waste in the toilet.
4. **Pregnant woman or persons less than 18 years old** should not change the soiled litter or clean up such spills. These people should not hold the cat or allow the cat to sit in their lap for the 2 weeks. They should avoid prolonged contact (i.e.: stroke the cat for 5 min., no longer than 20 minutes total per day). They should wash their hands anytime they touch the cat and especially before eating.
5. **All other persons** should also avoid prolonged face-to-face contact with the cat or hand contact with your cat's saliva and footpads. Keep your cat isolated at night, out of your bedroom. You may hold, pet and stroke your cat for short periods (e.g. pet and stroke for 5 minutes, no more than a total of 20 minutes per day; hold for no more than 1 minute, no more than 5 minutes per day). **Wash your hands after each time you handle your cat.** Wear your gloves to administer pills to the cat, if needed.
6. Keep your cat **away from food preparation areas** and your dinner plate. If your cat can gain access to kitchen countertops, be sure to wash them thoroughly before food preparation.
7. **Do not let your cat out.** This is to avoid spread of radioactive excreta outside.

If medical attention is required during these 2 weeks, return to Angell Memorial. If this is not possible, inform other veterinary hospital personnel of the radioactive iodine that your pet has received, show them this form and notify Dr. Duddy.

After 2 weeks, your cat will have essentially lost all radioactivity and you may return to your normal routine. **Segregate any remaining soiled materials and your gloves in a secure area for 3 months, then discard in normal trash.**

If you encounter any problems, please call Dr. Duddy at Angell Memorial Animal Hospital at (617) 522-7282.

I understand and agree to follow the safety precautions listed above.

Sign: _____ **Date:** _____

Release Date: _____ **Restrictions end:** _____