



VirginiaTech®

Virginia-Maryland  
College of Veterinary Medicine

**Veterinary Teaching Hospital**

Phase III, Duck Pond Drive  
Blacksburg, Virginia 24061  
540-231-7666 Fax: 540-231-7367  
[www.vetmed.vt.edu](http://www.vetmed.vt.edu)

Dear Referring Veterinarian:

The Veterinary Teaching Hospital at the Virginia-Maryland College of Veterinary Medicine is currently offering radioiodine ( $^{131}\text{I}$ ) treatment for hyperthyroidism in cats. This method of treatment involves a single subcutaneous injection of radioiodine and is effective in over 95% of cases in permanently resolving the hyperthyroidism.

Our current protocol involves evaluation of the cat on a Thursday, where it will undergo a physical examination, routine complete blood count and serum chemistries, serum T4 and TSH, urinalysis, fundic examination, and blood pressure. Provided these test results confirm the diagnosis of hyperthyroidism and do not identify other significant illness, the cat will be admitted for treatment. The following day, the cat will be sedated for thyroid scintigraphy which helps determine the dosage of  $^{131}\text{I}$ . The cat then undergoes treatment with  $^{131}\text{I}$  on Monday. The anticipated release day is the following Friday, with a total hospitalization time of 8 nights. Cats will be isolated and owners will not be able to visit after the day of presentation because of regulations associated with use of radioactive material.

In order to qualify, cats should be diagnosed by appropriate clinical signs and elevated serum total T4 concentration. Cats should be otherwise healthy, within reason for their age. Cats with illnesses that could be life-threatening if not treated or require supportive treatment during hospitalization will not qualify for radioiodine administration. This is because contact with cats after radioiodine administration must be restricted, the cats will be housed in an isolation area where they will not be allowed to enter the rest of the hospital, and diagnostic testing cannot be performed because of the radioactivity of the cat. This is similar to the standard procedure at most institutions offering radioiodine treatment. It is recommended, but not required that cats be treated with antithyroid medication for 4 weeks prior to referral in order to evaluate the effect that resolution of hyperthyroidism has on kidney function by evaluating serum chemistries and T4 during treatment. However, methimazole or y/d must be withdrawn for 2 weeks prior to their appointment to eliminate any effect on the radioiodine treatment.

Because cats will still have a small amount of radioactivity at the time of release, the cat will have to be isolated at home from other cats and remain inside for 2 weeks with minimal contact with the owner during this time. Litter will have to be collected for 2 weeks at home and either flushed or stored because of the small amount of radioactivity that will be released during this time period. No children or pregnant women can handle the cat or litter during that period.

Thank you for your support of the teaching and service programs at the VMCVM. If you have questions prior to referral, please contact Dr. Stefanie DeMonaco at (540) 231-4621.

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