



CLINICAL STUDY: INFORMATION FOR OWNERS

Use of a Complete Thyroid Panel (T4, T3, Free T4, TSH) and Thyroid Imaging (Scintigraphy) to Diagnose Iatrogenic Hypothyroidism in Cats

At the Animal Endocrine Clinic, we are enrolling cats into a study investigating the usefulness of a complete thyroid panel of 4 tests to help diagnose hypothyroidism (an underactive thyroid condition) that can develop in hyperthyroid cats after radioiodine treatment.

Although hypothyroidism was once considered a rare consequence of I-131 treatment for hyperthyroidism, we believe that mild forms of hypothyroidism may effect up to 10-50% of all cats treated with I-131. The incidence of hypothyroidism appears to depend primarily on the way the dose of radioiodine is calculated, and appears to be more common in cats given a fixed dose of radioiodine (ie, when all hyperthyroid cats get the same dose, no matter how severe the hyperthyroidism or the size of the thyroid tumor).

To date, it has been difficult to make a definitive diagnosis of hypothyroidism in cats. First of all, the finding of a low serum T4 concentration (the hormone most vets use to monitor thyroid function) is not diagnostic for hypothyroidism because many other diseases and many drugs can “falsely” lower the total T4 concentration. Secondly, most cats show only mild signs of hypothyroidism (lethargy, sleeping more), which may not be noticed by the owner or vet. After thyroid hormone replacement is given, increased activity and weight loss may be seen in these cats.

We anticipate that use of a complete thyroid panel of 4 tests (serum T4, T3, free T4, and TSH) will increase our ability to properly and accurately diagnose hypothyroidism in cats. This diagnosis, however, will be confirmed by thyroid imaging (thyroid scintigraphy), considered the “gold standard” diagnostic technique for thyroid dysfunction.

To be eligible to enroll in this study, the cat must have been treated with radioiodine. We would recommend doing this complete thyroid panel in any cat that has a persistently low or low-normal serum T4 value (<1.5 µg/dl) when retested at 3 months or longer after treatment. This is especially true if the cat has just developed kidney problems or has worsening kidney disease.

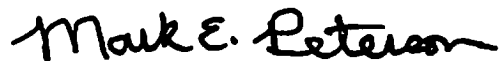
If your veterinarian uses either Antech or IDEXX labs (the two major veterinary laboratories located in the New York area), we will pay for this lab testing so you will have the **test results at no charge**. We expect that your veterinarian should charge you for a recheck visit (physical exam), as well as a blood draw/medical waste fee, but the serum chemistry profile and complete thyroid panel (a value of approximately \$250) will be done at no cost to you or your veterinarian.

If this thyroid panel is suggestive of hypothyroidism, we also will perform thyroid imaging (scintigraphy) as a means of confirming the diagnosis and validating the serum thyroid hormone panel. As part of this study, we will also do the **thyroid scan at no cost to you.**

Please do not hesitate to call (212-362-2650; 914-864-1631) or email us (info@animalendocrine.com) if you have any questions regarding this study.

Thank you for helping us all learn more about this important feline endocrine disorder.

Sincerely,

A handwritten signature in black ink that reads "Mark E. Peterson". The signature is written in a cursive, slightly slanted style.

Mark E. Peterson, DVM, Dip. ACVIM