HOSPITALIZATION PROCEDURE
Upon admittance, patients are hospitalized in the nuclear medicine ward by state regulations, separate from the rest of the hospital. We encourage owners to bring their cat’s normal food, some toys, and a blanket or towel to sleep with from home, for comfort.

**Thyroid Scan**
On the first day of hospitalization, a mild sedative is given intravenously, and an intravenous catheter is then placed for administration of the radioactive material Pertechnate (NaCoT4). This isotope allows us to measure the cat’s thyroid gland activity to the salivary gland activity with the gamma camera in the nuclear medicine ward. The ratio of activity allows us to then order the specific dose of I-131 solution your cat requires. The I-131 injection will be performed the following day.

**I-131 Injection**
The dose of I-131 is painlessly and quickly administered by a single injection subcutaneously. Patients are then hospitalized in the nuclear medicine ward for an average of 4-7 days. Under state regulations we can not discharge your cat until the radioactivity level has decreased to levels determined by the state to be safe.

*We welcome your phone calls to check on your cat’s status daily, however, in keeping with federal and state radiation safety guidelines, patient visits are not permitted.*

During hospitalization, your cat will receive daily assessments by our team of doctors and technicians. Radiation levels are monitored daily to determine when your cat is safe to go home.

Upon patient discharge, our staff provides you detailed instructions and guidelines to follow for the first three months after your cat goes home. The patient’s medical records are sent to your veterinarian to guide your cat’s post I-131 treatment and monitoring. A multitude of systemic disease such as respiratory, cardiovascular, renal and others can be caused by hyperthyroidism. Treatment of the hyperthyroidism is the best prevention, however, previous damage may need to be treated by your veterinarian.

*It is vitally important that any pre-existing problems related to your cat’s hyperthyroidism, or other disease, be regulated through regular semi-annual examinations and diagnostics performed by your veterinarian.*

WHAT IS FELINE HYPERthyroidism?

**HYPERthyroidism is one of the Most common diseases affecting middle-aged and senior cats**

With hyperthyroidism, the thyroid gland enlarges abnormally, causing the release of the thyroid hormones T3 and T4.

Signs and symptoms include:

- Increased appetite and/or thirst
- Vomiting
- Frequent urination
- Diarrhea
- Weight loss
- Hyperactivity
- Hair loss
- Behavior changes

If your cat shows any of these signs, your veterinarian should evaluate him as soon as possible. Your veterinarian can diagnose hyperthyroidism with a blood test showing increased hormone levels (T4). Treatment should begin promptly, before the disease causes secondary, degenerative, life-threatening problems.

*TREATING FELINE HYPERthyroidism*

**Radioactive Iodine Therapy (I-131) AND YOUR CAT**

**NEW ENGLAND REGIONAL VETERINARY IMAGING CENTER**
located at the Myhre Equine Clinic
100 Ten Rod Road
Rochester, New Hampshire 03867
603-335-4777
www.MyhreEquine.com

References:

*Image of an abnormal thyroid gland during a function test (courtesy of NY Thyroid Center). Red shows “hot” overactive areas indicating disease.*
Radioactive Iodine Therapy

- Does not require anesthesia in cats with compromised health
- Does not involve surgery
- Eliminates daily medicating
- Has no harmful side effects
- Does not damage healthy thyroid tissue
- Is the most cost effective treatment
- Shows therapeutic results within 1 month
- Is recommended by virtually all medical experts and veterinary medical schools

Our compassionate medical team represents years of nuclear medicine experience and feline care. We can promise your companion will be in the very best hands at New England Regional Veterinary Imaging Center.

Radioactive Iodine Therapy is proven to be over 99% effective in curing hyperthyroidism in cats.

A recent study of hyperthyroidism revealed that cats treated with Radioactive Iodine Therapy (I-131) lived an average of three years longer than cats treated solely with Tapazole. Scanning the thyroid prior to I-131 treatment often helps establish a more precise treatment dosage for cats. A thyroid scan can also assist with diagnosing other conditions such as cancer.

**TREATMENT OPTIONS**

Once hyperthyroidism is diagnosed, several treatment options exist

Hyperthyroidism treatment options include:
- Oral medication (Tapazole)
- Surgical removal of the thyroid (Thyroidectomy)
- Radioactive Iodine Therapy (I-131)

Of the three options, medical experts consider I-131 the safest and most effective treatment for hyperthyroidism. Oral medication can have detrimental side effects, such as liver disease, which, although infrequent, can have serious health implications. Research has shown that there are upwards of 18% adverse effects associated with Tapazole, of which liver disease is one. Additionally, surgical treatments require general anesthesia and pose potential risks for patients compromised by hyperthyroidism.

**I-131 TREATMENT PLANS OFFERED**

Prior to admittance, owners must decide if they would like the recommended Thyroid Nuclear Scan performed prior to the I-131 injection or just the average dose of I-131 solution injected. The thyroid scan allows us to calculate a more effective dose of I-131 your individual cat requires to destroy the current overactive thyroid tissue. The thyroid scan increases the success rate of complete resolution of thyroid disease from 85% to 99% with the average dose treatment. Thyroid scans do require a mild sedative given intravenously but do not require general anesthesia. Increased T4 on blood work does not correlate with the amount of overactive tissue, and so it cannot be used to calculate an exact dose.

**WHEN CONSIDERING PATIENT REFERRAL FOR I-131 THERAPY**

Please review the following protocol

A complete blood count, general health profile, and thyroid level (T4) must be received from your referring veterinarian within 30 days prior to beginning therapy. Chest radiographs and urinalysis with specific gravity, are also recommended. Any further diagnostics, such as ECG and thoracic and abdominal ultrasounds, can be performed by your veterinarian or at our facility at your veterinarian’s direction. Patients medicated with Tapazole for longer than 90 days should discontinue treatment at least seven days prior to I-131 therapy and have thyroid hormone levels checked seven days after discontinuing the medication. Contact our facility, consult your veterinarian or visit our website at www.MyreEquine.com for more information and to schedule your cat’s treatment.