

**VETERINARY VOICE:  
Tips of the Trade**

**Feline Hyperthyroidism – I-131 treatment**

**What are the treatment options?** Medical, surgical and radioactive iodine are the current treatment options for feline hyperthyroidism.

Methimazole is an effective treatment, although it requires daily and lifelong therapy in order to maintain normal T<sub>4</sub> level. There are occasional adverse reactions to this medication as well.

Surgery is effective if the condition is unilateral with no ectopic thyroid tissue. Most cats have bilateral adenomatous hyperplasia. These variations can only be known if thyroid scintigraphy is performed prior to surgery.

I-131 is a radioisotope that is trapped and organified by follicular epithelial cells of the thyroid gland. The hyperplastic thyroid tissue is destroyed by beta (electron) decay of the radioactive iodine.

**What are the benefits of I-131?** Most cats become euthyroid following a single treatment. I-131 will destroy bilateral hyperplastic and ectopic thyroid tissue. Typical hospitalization time is 3 days (i.e. inject Tuesday, release Friday).

**What are the risks of I-131 to the patient and client?** The primary complication of I-131 treatment is iatrogenic hypothyroidism, although this is rarely clinically apparent. Cats will occasionally require a second treatment.

The client will be sent home with specific instructions as to proper disposal of waste and how to limit exposure from their pet.

**Questions?** The Veterinary Specialty Center of Tucson has a board-certified radiologist available to consult about radiographs and to perform inpatient and outpatient ultrasound, CT scans, and I-131 treatment during the weekdays. He is also on call to provide consultations to VSCT emergency doctors and to perform emergency procedures, such as ultrasonography, for patients seen by the VSCT emergency service. Board-certified radiologists have four additional years of training after veterinary school and are certified by the American College of Veterinary Radiology to assure competency in advanced veterinary diagnostic imaging.

**Radiology Expert:**  
Michael Roy, DVM,  
MS, DACVR