Radioactive Iodine (I-131)

Therapy for hyperthyroid cats

Santa Cruz VETERINARY HOSPITAL

Case Work-Up

A recent blood profile (CBC, chemistry panel), T4, urinalysis and thoracic radiographs provide an adequate minimum database for most patients. All patients should have bloodwork completed within 2–4 weeks of their scheduled treatment date. Cats that have significant concurrent problems, such as hypertension, cardiac disease or renal failure may need further diagnostic tests, including cardiac ultrasound and/or blood pressure measurements prior to treatment. Some cats may require stabilization with hypotensive agents or cardiac medications prior to treatment with radioactive iodine. Once initial diagnostics have been completed, please contact Santa Cruz Veterinary Hospital (SCVH) at 831.475.5400.

Methimazole (Tapazole) Therapy

In most cases, trial therapy with methimazole may be recommended in an attempt to rule out underlying renal disease. Renal disease may be masked by the increase in renal blood flow seen in hyperthyroid cats. In general, a 4 to 6 week course of therapy is recommended with a follow-up chemistry profile, CBC, urinalysis and T4. Patients MUST be off methimazole therapy for at least 3–5 days prior to treatment with I-131.

Scheduling an Appointment

Please contact us if there are specific cases you would like to discuss. The referral coordinator at SCVH can schedule an initial client consultation. If more extensive testing is necessary, this may be completed in our hospital or by the referring veterinarian prior to radioactive iodine therapy. Treatments are scheduled monthly on Tuesdays. All scheduling must be completed by 2:00 pm on the Thursday preceding treatment.

Client Communication

Once the patient has been examined and the medical history (including lab and thoracic radiograph results) has been reviewed by SCVH, the client will receive a consent form for treatment and the patient will be scheduled. Please give your client a copy of the Client Information Handout. You may call us or go to santacruzveterinaryhospital.com and click on the link for radioactive iodine therapy to download this document.

Patients are hospitalized in the nuclear medicine ward at SCVH for 2–4 days. We are happy to reassure clients about the personalized attention their pet will receive during their stay at SCVH. We tailor the environment to meet the individual physical, nutritional and emotional needs of the patient and the owner. Owners are updated on a daily basis about their pet's status during the period of hospitalization.

Radioactive Iodine Treatment Protocol

The I-131 dose is determined by the cat's serum T4 concentration. Radioactive iodine is ordered the Friday prior to the scheduled treatment, with the dose being delivered as a single subcutaneous injection. The patient is then hospitalized in the nuclear medicine ward until radiation emissions have dropped below the state approved levels. A small percentage of cats may require additional therapy; it can take up to 6 months for the full effect of radioactive iodine therapy to manifest.

Post-Treatment Follow-up & Care

Upon release, the patient will be emitting a small amount of radioiodine. A dismissal appointment will be scheduled and clients will receive detailed written homecare instructions. Patients should be isolated at home for a three week period following treatment. The client should avoid close contact with the treated pet (limit contact to 30 minutes) during the first week. Contact during the following two weeks is also restricted.

Clients are instructed to return to their referring veterinarian for serum T4 evaluations at 1 and 3 months following treatment. If the T4 is normal by 3 months, routine evaluation is recommended at 6 month intervals.

Even when T4 concentrations are below the reference range following I-131 therapy, supplemental thyroid hormone is rarely required. If the cat has clinical signs of hypothyroidism (lethargy, obesity, dull haircoat, etc.) and a persistently low T4, thyroid hormone supplementation may be beneficial.

If you have any further questions about radioactive iodine therapy, please feel free to call us.