

Post-radioactive iodine treatment – information for referring veterinary surgeons.

As standard, all owners are advised to arrange for their cat to be re-assessed by your veterinary practice 3- and 6 months post radioactive iodine treatment.

Occasionally, cats will be presented to your practice 1-2 weeks post discharge for repeat blood pressure measurement. These are cats that were found to be borderline hypertensive at the time of discharge with no evidence of target organ damage. Should cats remain hypertensive (SBP >160 mmHg or have developed hypertensive target organ damage e.g. ocular), we recommend prescribing anti-hypertensive medication (i.e. amlodipine) and monitoring their response to treatment appropriately. Please contact us if you would like to discuss hypertensive management further.

At the 3- and 6- month post-treatment appointments we recommend that cats have a full physical examination performed including being weighed, with urine and blood samples obtained and submitted for urinalysis (specific gravity, dipstick and sediment examination), total T4 concentration and biochemistry (to include a minimum of urea, creatinine, cholesterol and ALT). Samples obtained at 6 months should be submitted to the RVC (price included in initial radioactive iodine treatment fee; submission forms available on this website).

We recommend the following if total T4 is low at the 3-month check:

- If creatinine is normal, no treatment is required.
- If azotaemic with specific gravity <1.035, submit a blood sample to an external laboratory to evaluate TSH (canine assay).
- If TSH normal, no treatment required and re-assess at 6-month.
- If TSH > 0.15 ng/mL with evidence of reduce renal function, consider prescribing levothyroxine (see below).

We recommend the following if total T4 is low at the 6-month check:

- If TSH normal, no treatment required
- If TSH > 0.15 ng/mL:
 - o If creatinine normal, thyroid supplementation can be administered if the clients would like to. This could be considered if cats are clinical for their hypothyroidism, i.e. excessive weight gain with poor appetite, or dull and lethargic
 - o If azotaemic with specific gravity <1.035, levothyroxine should be prescribed to reduce the rapid ongoing deterioration of renal function

Levothyroxine supplementation (Leventa®, 1mg/mL):

- Administer 100ug (0.1mL)/cat twice daily on food or 150ug (0.15mL)/cat once daily on food.
- Total T4 and renal function should be re-checked 1-month later, 4-6 hours post-dosing.
- Levothyroxine dose should be altered based on clinical condition in combination with test results and re-checked 1-month after any dose change.
- If an appropriate dose is identified, thyroid function should be re-assessed 1-2 times per year or as clinically indicated. Concurrent renal function should be monitored and treated as per the IRIS guidelines.

If you have any questions, please do not hesitate to contact us at qmhreception@rvc.ac.uk.