

Radioactive Iodine (I-131) Treatment

What is hyperthyroidism?

Hyperthyroidism is caused by an 'over-active' thyroid gland. It is the most common hormonal disorder of older cats. The paired thyroid glands are located in the neck, and produce a hormone called thyroxine ('thyroid hormone') which controls many of their metabolic or 'energy using' functions. With hyperthyroidism, the thyroid gland becomes enlarged and produces excessive thyroxine, usually due to the presence of one or more benign tumours in the glandular tissue. This leads to clinical signs including changes in behaviour, weight loss, increased appetite & thirst, and potentially life threatening damage to major organs such as the heart & kidneys.

Why choose radioactive iodine treatment?

Daily tablets or topicals to manage hyperthyroidism can be difficult to administer and are required for the rest of the cat's life, along with close monitoring and regular blood tests to ensure the correct dose is being used. Importantly, these medications are only 'controlling' not 'curing' the condition and it can become more difficult to manage with time. When you take into consideration all the costs required for medically managing a hyperthyroid cat over a one year period, the cost is about equivalent to the single curative treatment usually required with radioactive iodine.

How does radioactive iodine treatment help?

Radioactive iodine treatment is recognised world-wide as being the gold standard treatment for hyperthyroid cats. After being administered as an injection under the skin, the radiation is concentrated in the thyroid gland, painlessly destroying the overactive tissue whilst having no adverse effects on the rest of the body. In about 98% of cats a single treatment is curative. Furthermore studies have shown that the life expectancy of hyperthyroid cats treated with radioiodine is longer than those treated with daily medical management.

Is the treatment safe?

While exposing your cat to radiation may appear a bit risky, this method has been used successfully for many years in animals and humans with very few side-effects. The dose of radiation used is very small which means in general it does not penetrate tissues outside of the thyroid gland. However your cat will excrete small amounts of radiation in their saliva, urine & faeces for several days after treatment which means they need to be isolated during this period so their waste can be collected and stored appropriately. Radioactive iodine treatment of cats who are already very unwell or have other pre-existing conditions (especially heart or kidney) needs to be considered very carefully due to the potential for them to worsen during & after the process.

What is required prior to starting treatment?

If your cat is currently on any medication, including those being used to manage hyperthyroidism eg. tablets, gel or prescription diet, these will need to be discontinued one week prior to starting radioactive iodine treatment. In addition, if your cat is normally fed a diet containing a high percentage of animal by-products (eg. high in iodine) this should be replaced with a premium quality balanced food until treatment has been completed. Speak to your veterinarian about ongoing treatments & dietary options before making a booking.

What does treatment involve?

Due to the specialised handling requirements around radioactive materials, your cat will need to be treated at the certified premises of VetsOne Ltd, 500 Maraekakaho Rd, Hastings. You will have an initial consultation with a supervising veterinarian who will talk you through the process & answer any questions you may have prior to your pet being admitted to the hospital for treatment. Once the radioactive material has been administered under the skin, your cat will need to remain isolated in the hospital ward for a minimum of 7 days. You will not be able to visit your pet during this time due to the small risk of exposure to radioactivity, however our staff will send you regular updates on how your animal is doing. Once the hospitalisation period is completed, your pet will be discharged back to you for ongoing care at home.

What happens when my cat comes home?

For two weeks after your cat arrives home you should:

- Avoid more than a few minutes in close proximity to the cat, especially during the first week after release. This includes activities such as sitting on someone's lap or sleeping next to them on a bed or chair. In particular, avoid 'face-to-face' contact or licking, and wash hands thoroughly after handling the animal. Children & pregnant women should avoid all contact with treated cats for the full two week period.
- Place a litter box in an unoccupied area of the house for the cat to use for toileting. If the cat urinates or defaecates inside the house, clean or soak it up thoroughly with paper towels and place them in a sealed waterproof rubbish bag prior to disposal with normal household waste. Wear rubber gloves and wash hands thoroughly afterwards. Soiled garments should be washed separately in a washing machine.
- Make sure the cat cannot jump onto the kitchen bench or any other food preparation & storage areas

If following these instructions may be difficult (or at your preference) your cat may be hospitalised for up to 20 days until this restrictive period of contact is over. After 20 days post-treatment you can interact with your cat normally.

A follow-up blood test will be required 4-6 weeks after leaving the hospital to assess the effectiveness of treatment, along with ongoing regular health checks. This can be done at VetsOne or by your normal veterinarian.

While a single I-131 treatment for Feline Hyperthyroidism is generally curative, in a very small percentage of cats (<2%), further medical, dietary or I-131 treatment may still be needed to fully control the overactive thyroid. There is also a small chance that treated cats may become *hypo*-thyroid (eg. not produce enough thyroid hormone) and require ongoing medication to support normal metabolic function.

How do I arrange treatment for my cat?

Your veterinarian will talk you through all of the 'control' versus 'treatment' options available for managing feline hyperthyroidism and help you decide which one is most appropriate for your pet and situation. Radioactive iodine treatment is a referral procedure which must be organised through your normal vet. They will need to have performed suitable testing on your cat & provided appropriate health records to VetsOne on your behalf in order to be considered for treatment. Once this assessment process is complete, VetsOne will contact you directly to organise your booking.