

Nuclear Medicine Exam Information Hyperthyroid Therapy

There are various ways to treat hyperthyroidism; one common method is the use of radioactive iodine (¹³¹I). This iodine dose differs from the one used in diagnostic thyroid imaging. When absorbed by the thyroid, it emits a type of radiation that will cause damage to individual thyroid cells. The desired effect of this treatment is to reduce the overall thyroid function to a normal level.

Radioactive iodine therapy is a safe method for treating hyperthyroidism and is commonly used. However, the treatment does require a radiation dose significantly higher than that used in diagnostic imaging. Because of this, there are a number of precautions that should be taken to reduce radiation exposure to those around you—the dose is beneficial to the patient with hyperthyroidism, but not to those nearby. The guidelines outlined in the chart below serve to reduce radiation exposure to family, friends, and other members of the public.

The effects of radioactive iodine therapy are generally not immediate. Results may not begin to show for anywhere from 2-6 weeks; the full effect of the therapy can take up to 3 months. It is also important to note that patients undergoing radioactive iodine therapy may eventually be reduced to a hypothyroid state—a condition in which the thyroid does not produce enough hormone. This can be managed with medication; consult your physician for additional information.

Exam preparation for the hyperthyroid therapy is identical to that of the thyroid uptake & scan; refer to that exam information sheet for detailed prep instructions.

Due to the nature of radioactive emissions from ¹³¹I Sodium lodide, female patients under the age of 56 will be required to perform a pregnancy test the day of the therapy unless documentation of surgical hysterectomy can be provided.

Nuclear Medicine Hyperthyroid Therapy Post-Care Instructions

- Drink plenty of fluids for the first 2 days.
- Maintain a distance of 6 feet from family members and other individuals.
 Do not be concerned about being close to other adults for brief periods of time.
- > Do not hold small children and avoid contact with pregnant women. Avoid direct or indirect contact with infants and children for 4 days. Consider having children stay outside the home with other family members if possible.

Indirect contact includes close proximity to other adults who will directly interact with children.

- Arrange living space at home (e.g. bedroom, bathroom) that can be used exclusively by you for 2 days. Sleep in separate beds to reduce radiation exposure to your mate for 2 days.
- Minimize time spent in public places (public transportation, stores, theaters, sporting events, restaurants).
- If your treatment was given to you orally, some of the radioactivity will remain in your stomach for 24 hours. It is unlikely that it will make you nauseated; however, if you feel you have to vomit, try to do so directly into a toilet and then flush several times. Notify your physician as soon as possible if you vomit in the first 24 hours.
- Radioactive material may be present in your urine for a time. Use the toilet from a sitting position and flush the toilet after each use. If urine is spilled, wash the affected areas several times with soap and water using disposable paper towels. This includes urine spilled in places such as a hotel room.
- A small portion of the radioactive material will be found in your saliva and sweat. Do not allow others to eat or drink after you. You may consider using disposable plates and utensils during this time. Use separate towels and washcloths.
- Wash your clothing, towels, bed linen, etc. separately from those used by others.
- > Do not become pregnant in the next 3 months.
- Radioactivity can be found in breastmilk following administration of ¹³¹I Sodium lodide. Patients being treated with ¹³¹I Sodium lodide must completely stop breastfeeding for the current infant or child.