



Asheville Endocrinology Consultants

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RADIOACTIVE IODINE TREATMENT - GENERAL INFORMATION

It is important to us that you understand what will be involved during and after your treatment with radioactive iodine. Knowing what to expect will make your experience go much more smoothly.

What is radioactive iodine therapy?

Iodine is a chemical that is normally absorbed and used by thyroid tissue. When you are given a radioactive form of iodine, called I-131, it will deliver radiation to thyroid tissue. Lower doses are used to reduce thyroid function, and higher doses are used to destroy thyroid tissue. Your doctor will decide how much you receive based on your health needs.

How does radioactive iodine work?

You will swallow a capsule containing the radioactive iodine. It will dissolve and travel through the blood stream to your thyroid. Any remaining radioactive iodine that does not go to your thyroid will leave your body, mostly through your urine.

Radiation emitted by the I-131 causes damage to thyroid tissue. Your thyroid cells will decrease the production of thyroid hormone, in most cases forever. This change in your thyroid will appear 6 to 12 weeks after treatment.

After your treatment, your doctor may prescribe a thyroid hormone medicine. This medicine is a manmade version of the hormone that a normal thyroid would make. So, you will need to continue to see your doctor after treatment even if the treatment is completely successful.

I-131 also emits gamma rays, which are similar to X-rays. Gamma rays can be detected by a special camera and are useful for diagnosis. Gamma rays can also be a hazard for people around you. We must take precautions to protect those around you from radiation exposure during the first few days after your treatment.

Preparation for treatment

Initial Radioactive Iodine Test: For hyperthyroidism, the first step is a low-dose diagnostic test that will tell how much I-131 you will need for your treatment. Your doctor will review the results of your test dose and decide the strength of your therapy dose. You will usually return later in the day to take the higher-dose therapy capsule, or in some cases you will be asked to return at a later date.

Medicines: Before your treatment your doctor will tell you what medicines to stop taking. This may include thyroid hormone medicine. *Speak with your doctor before you stop taking any medicines.*

Diet: Your doctor may ask you to follow a low iodine diet for two weeks before treatment. This helps your body absorb more of the radioactive iodine during treatment. The diet will be explained to you by your doctor if you need to follow it.

Pregnancy Test: Pregnant women should not receive radioactive iodine, as it may be harmful to the fetus. Women of childbearing age are required by the hospital to have a pregnancy test (blood test) on the day of treatment to confirm they are not pregnant.

Breastfeeding: Radioactive iodine leaves the body through fluids, including breast milk. Women must completely stop breastfeeding three months before receiving radioactive iodine treatment. Milk produced by breastfeeding women will cause the radioactive material to go to the breasts and can cause problems.

Housing situation: Your doctor's office will ask about your living arrangements before your treatment appointment, and this information helps the Nuclear Medicine Department ensure appropriate precautions can be taken after treatment.

On the day of treatment:

At the hospital you will check in with Patient Registration at the Surgery Entrance. You will then be taken to the Nuclear Medicine Department for your treatment.

Our staff will prepare you for your treatment. Women of childbearing age (12-50 years old) are required to take a pregnancy test (blood test). A nuclear medicine technologist will meet with you to answer any questions you may have about the process. A radiologist (a doctor specializing in use of radioactive material) will meet with you to discuss the effect that your treatment will have on your thyroid and overall health.

The nuclear medicine technologist will bring in the radioactive iodine capsules. You will receive 1 or 2 capsules depending on your dose. You will swallow the capsule with water, and then you will be allowed to leave.