

Thyroid Cancer Evaluation and Therapy

How do I prepare for my evaluation and therapy appointments?

- If you take levothyroxine (Synthroid®, Levoxyl®, Levothroid®, Armour® Thyroid or Nature-Throid®), you must stop taking your medication **at least 4 weeks** before your appointments.
- If you take Cytomel® or Liothyronine®, you must stop taking your medication **2 weeks** before.
- Avoid any extra iodine, including x-rays or CT scans done with injections, for **at least 4 weeks** before.
- Start eating the low iodine diet 2 weeks before your appointments.

What happens the Thursday before my appointments?

You will have your blood drawn at your local lab to make sure that your **TSH** (Thyroid-Stimulating Hormone) is greater than 30. If your TSH is greater than 30, your scan and therapy appointments can go on as planned.

What happens on Day 1?

On Day 1, you can expect to be at the hospital lab and the Nuclear Medicine department at Michigan Medicine for 3-4 hours.

- Before coming to the Nuclear Medicine department, you will need to stop at the lab in the hospital for extra blood and urine tests.
 - The blood tests will measure your thyroid levels and kidney function.
 - The urine sample will check for iodine, making sure that your low iodine diet was successful.
 - If you are of childbearing age, we will ask you to take a pregnancy test.

- Once you arrive at the Nuclear Medicine department, we will take radiation measurements before you receive a radiation dose.
 - You will drink your radiation dose through a special straw. This dose has no taste. You will not have to take any radiation exposure precautions at this time.
- We will take other radiation measurements after your stomach has absorbed the radiation dose.

What happens on Day 2?

On Day 2, plan on being at the Nuclear Medicine department at Michigan Medicine all day.

- We will take radiation measurements and then schedule standard scans and another scan called a SPECT/CT for that day.
 - The standard scans are 2 sets of pictures. The first scan is of the whole body, and the second scan is of the chest and neck. Each scan lasts about 20 minutes.
 - After they look at the standard scans, your doctor may decide you need a **SPECT/CT** scan. A SPECT/CT is done to look more closely for thyroid cancer tissues in the surgery site or neck if they notice anything on the standard scans. We cancel this scan if the doctor decides you do not need it.

What happens on Day 3?

On Day 3, plan on being at the Nuclear Medicine department at Michigan Medicine for 2-3 hours.

- If your doctor has recommended any more scanning, you will have more scanning done.
- You will have a clinic visit with a thyroid Nuclear Medicine doctor after all your scanning is complete. The doctor will go over your scan results and let you know if they recommend radioiodine therapy.

- If your doctor recommends therapy and you don't need more scans, you receive therapy on Day 3. Radiation exposure precautions will start when your therapy begins.
- Please do not bring small children to your appointment.
- Do not plan to stay in a hotel. Plan to go directly home if you receive therapy, since radiation exposure precautions will be in place.

What happens on Day 4?

On Day 4, you will be at home.

- Starting when you wake up on Day 4, take your prescribed thyroid hormone medicine and stop eating the low iodine diet.

What happens on Day 5?

On Day 5, you can plan on being at the Nuclear Medicine department at Michigan Medicine for 1 hour.

- You will have a scan to check that the therapy dose has reached your thyroid tissue and is working.

Who do I call if I have questions?

If you have any questions, please call the University of Michigan Health System Nuclear Medicine department at (734) 232-6072.

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