

Lymphoscintigraphy Scan

What is a Lymphoscintigraphy Scan?

A lymphoscintigraphy scan is a test that takes pictures of your child's lymphatic system. The lymphatic system has many functions including delivering nutrients to the body, getting rid of waste products, and immune upkeep. It is performed in the Nuclear Medicine department and uses a special kind of camera called a gamma camera. This camera does not give off radiation. We perform the study by giving your child an intravenous radiopharmaceutical "tracer". This is a medicine combined with a small amount of radioactive material. It travels to the area of your child we need to see and is imaged by a gamma camera.

Radiopharmaceuticals are carefully tested. The risk of side effects is rare and give low radiation exposure.

<http://snmmi.files.cms-plus.com/Patients/Nuclear%20Medicine%20and%20Radiation%20Safety%20Factsheet.pdf>

Why is this exam performed?

This scan is used to look at the lymph system and how it drains, count the number of nodes and see where they are located. If there are nodes that need to be biopsied, the scan will mark the location.

What to expect

If your child does not require medication to sleep for the exam, one parent or guardian may be with your child in the exam room. It may be helpful to make arrangements for other siblings. For safety reasons, you will be asked to step out of the exam room if you could be pregnant.

Preparing your child is key to the success of this study. To help prepare your child, our Child Life Specialists will help ease your child's fear and anxiety. Please let a staff member know if you are interested in a Child Life consultation at no additional cost.

Injections performed during this scan can be painful. Most children 10 years or younger are scheduled with some type of sleep (sedation) medication. If your child is older than 10 and will need sedation, please request this at scheduling as these services are offered on a limited number of days each week.

If the exam was ordered to find the sentinel node for biopsy, surgery is generally scheduled the same day after the exam.

For those children requiring sedation for the test, you will be able to stay with your child until he or she is asleep.

Any child receiving sedation for the exam can:

- Eat food up to 8 hours before your arrival time.
- Drink milk, formula, and food thickener up to 6 hours before your arrival time.
- Breastfeed or given breast milk up to 4 hours prior to your arrival time.
- Only drink clear liquids up to 1 hour prior to your arrival time (water, Pedialyte, Sprite, 7-up, or apple juice). Orange juice is not a clear liquid.
- Take prescribed medications with a small sip of water (if needed) prior to arrival time unless otherwise specified.
- **If these instructions are not followed, the exam may be rescheduled or cancelled due to the risk posed to your child.**

You will meet with a Nurse Practitioner and/or the doctor who will be providing the sedation medication. You will have the opportunity to ask questions, discuss risks, and will be asked to sign your consent.

Your child and the accompanying adult will be taken to the procedure room by a technologist and asked to change in to a gown. The technologist will ask why the study is being done and explain it to your child.

For this 45-150 minute exam:

- An intravenous line, also known as an IV, is required to administer the radiopharmaceutical and additional medications. An IV is a tiny tube that is used to give the body medicine. Your child might feel a pinch or a poke when it goes in the vein, however, we have ways to manage the pain associated with it.
- To make sure your child is safe and can hold still for the test, we use “seatbelts” to help. Seatbelts can be Velcro straps, swaddle blankets, or tape straps. They can be quickly removed in the event of an emergency.
- A technologist will place numbing cream on the injection site prior to any injections.
- Your child will lie on his/her back on the exam table, beneath the gamma camera. The table will move slowly under the camera during the exam. Although the camera will be close, it will not touch your child.
- If the exam was ordered to image the lymph system, we will inject between the toes or fingers, depending on the area needing pictures. This will require three injections for each limb. Pictures are taken immediately after injection, at the 45 minute mark, and again at 2 hours. Your child will be allowed to take a break between pictures if not sedated.
- If the exam was ordered for sentinel node biopsy, we will inject 4 times around the tumor and image for approximately 45 minutes.
- In both cases, your child will need to remain still for the entire exam.
- We have television in all the exam rooms which may be used if your child is not sedated. You can also bring a tablet with your child’s favorite movies.
- You will be provided discharge instructions at the conclusion of your appointment.

If your child received anesthesia

Your child may be sleepy and unsteady from the anesthetic for several hours. Your child may have a red face or be slightly swollen around the face and eyes. This should improve within 24 hours. Your child may wake up feeling hungry.

When he or she is wide awake, the recovery nurse will give clear liquids such as Pedialyte, apple juice, Sprite or water. If your child does not throw up during the next 30 minutes, he or she can eat normally.

To prevent accidents, closely monitor him or her for the next 24-48 hours. Walk with your child, holding hands even if he or she seems to walk without trouble. It is also important to help your child in the bathroom. The sedative and the test may disrupt your child’s routine. You may notice a change in behavior for the rest of the day. Some children may become cranky. Some children sleep for hours. Others need to stay up late because they slept for the test. Be patient. Things will be back to normal the next day.

When to seek help

Call 911 if your child has difficulty breathing and looks very pale or has blue lips or nails or a very high fever (greater than 103°F).

Call your child’s doctor if your child has any of the following:

- Red blood in the urine, pain
- Throws up more than three times
- Seems confused or dizzy the next day, is harder to wake up than usual
- Has a sore throat that gets worse or does not go away in two days
- Has a fever of over 101°F for more than 24 hours
- Develops any allergies such as hives, itching or a rash

Receiving your Lymphoscintigraphy Scan results

Call your doctor for a follow up appointment as instructed. You can also call the doctor who ordered the study for the results 24 to 48 hours after the test. If you have any additional questions or concerns, please don’t hesitate to call Radiology Nursing at 832-826-5371.

If you would like a CD of your child’s study, please call the film library at 832-822-1202. The Radiologist’s report will also be included on the CD.