

# Breast Sentinel Node Procedure

## What Is a Sentinel Node and Why Is It So Important?

The sentinel node is the first lymph node in the chain that drains the lymphatic fluid from the breast. It is commonly found among many other lymph nodes located in the armpit.

**If** a cancer were to spread, there is a good chance that tumor cells will be found in the sentinel node. Since all the lymph nodes tend to look the same, your surgeon is interested in finding and removing only the sentinel node and leaving the rest of the lymph nodes.

## What Happens During the Procedure?

The procedure itself involves four injections of a radioactive tracer. Using a very tiny needle, a large drop of the tracer is injected into the skin around the nipple. Thinking of the nipple as a clock, the tracer is injected at 12, 3, 6 and 9 o'clock positions. Despite this very tiny needle and the amount being only a drop, the injections tend to hurt because the fluid is pushed in between the layers of skin. Many patients describe this feeling like a bee sting. Fortunately, as quickly as the pain comes on, it quickly disappears once the injection is over. When the injections are all done, a piece of gauze is taped over the injection sites and we ask you to gently massage the breast to get the tracer moving to the sentinel node.

## Then What Happens?

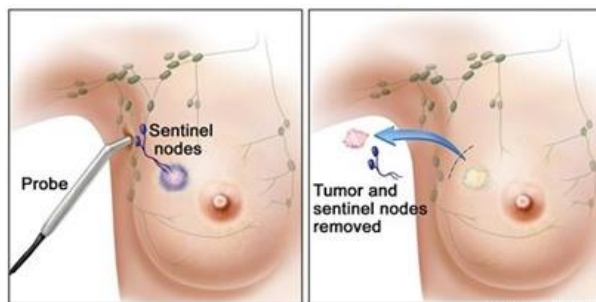
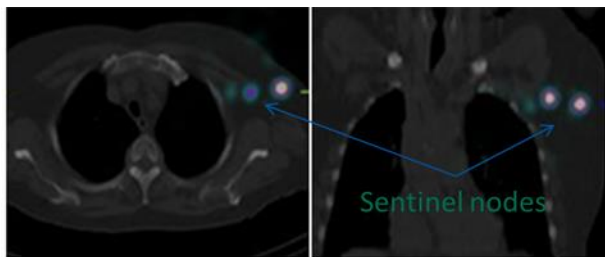
We allow about 15 to 45 minutes for the tracer to get to the sentinel node before imaging. For the pictures, you will lie on a table with your arms above your head. The pictures take about 15 minutes. It is very important that you hold still throughout the pictures.

## What About My Results?

The technologist ensures at least one sentinel node is identified on your images before allowing you to leave the department. If the sentinel node is not identified, additional images may be required and a radiologist will be consulted.

The technologist will process the images for the radiologist to report immediately. The images and report are available to your surgeon before your surgery.

During your surgery, the surgeon will locate the sentinel node by using a probe that measures radioactivity. Once the sentinel node is removed it is sent to pathology to be examined under a microscope. Your surgeon will provide you with the results from the pathologist.



## Precautions and Side Effects

There are no side effects to the radioactive tracer. It is **not** a dye or contrast that is commonly used in X-ray.

There are no special precautions. If your procedure is scheduled on the afternoon the day before your surgery, you can bathe as usual as it will not affect the procedure.

If you plan on crossing the border or travelling by air within 72 hours of the procedure, please notify the technologist prior to leaving the department.

## How Long Does It Take?

The procedure itself only takes a few minutes, but from start to finish expect to be here for about an hour.

## Do I Have to Go In a Tube?

The cameras are shaped like two boxes. As they rotate around you, the cameras move in and out to contour your body. They are equipped with a very sophisticated set of sensors to ensure they move very close but never touch you. You will also have a low-grade CT and it is shaped like a tube. The CT enhances the quality of our pictures but it is not designed to be diagnostic in any way.

## What About EMLA Cream?

EMLA is an over-the-counter topical cream that can be used to numb the skin. This may relieve **some** of the pain involved in the procedure, but many patients will still experience some discomfort. Any questions specific to the cream and its use should be directed to your surgeon or pharmacist. Also, be sure to ask about the possibility of an allergic reaction.

## Still More Questions?

Questions regarding the sentinel node procedure can be directed to a nuclear medicine technologist at 519-464-4400, Ext. 5274 between 8:00 am and 4:00 pm Monday to Friday. Questions that fall outside our area of expertise will be directed to your surgeon.

Your doctor's office will inform you what time to be at the hospital for registration. This time varies depending on other procedures you may have scheduled.

You must register at **Patient Registration** prior to your procedure. The staff at registration will direct you to the waiting area for Nuclear Medicine. A technologist will meet you in the Nuclear Medicine waiting area at your scheduled appointment time.

There is **no** special preparation for the sentinel node procedure. **However**, please ensure you follow the preparation requirements for any other procedures you may have scheduled.