About Your Immediate Lymphatic Reconstruction (ILR) Procedure

This information explains immediate lymphatic reconstruction (ILR). It also will help you know what to expect after your breast surgery with axillary lymph node dissection and ILR.

About Lymphedema

When lymph nodes in your armpit (axilla) are removed during your axillary lymph node dissection, nearby lymphatic vessels can be damaged. This can make it hard for your lymphatic system to drain properly. If this happens, lymphatic fluid can build up in your arm, hand, breast, or torso on your affected side. Your affected side is the side of your body where your lymph nodes were removed.

When too much lymphatic fluid builds up in an area, it causes swelling called lymphedema. You may also feel heaviness or pain in the area, have a higher risk for infections, or both. Lymphedema symptoms can be mild or severe (strong) enough to make the area grow very large. Sometimes, symptoms don’t develop for months or years after surgery.

Out of every 100 people who have an axillary lymph node dissection, about 15 to 25 people develop lymphedema. About 75 to 85 out of every 100 people don’t develop lymphedema. If you’ve had radiation therapy in the area, your risk of developing lymphedema may be higher.

There’s no cure for lymphedema, but there are treatments, such as massage and compression garments. Compression garments are pieces of clothing that squeeze an area of your body to help with swelling.
For more information about lymphedema, read the resource Common Questions about Breast Cancer-Related Lymphedema (www.mskcc.org/pe/questions_breast_cancer_lymphedema).

**About ILR**

ILR is a procedure to rebuild damaged lymphatic vessels to help lymphatic fluid drain from an area. This can lower your chance of developing lymphedema. Your plastic surgeon will do your ILR procedure during your breast surgery after your breast surgeon finishes your axillary lymph node dissection. It usually takes less than an hour.

You don’t need to follow any extra steps to get ready for your breast surgery.

**During your ILR procedure**

First, your plastic surgeon will find the damaged lymphatic vessels. To do this, they’ll inject (give you a shot of) green dye. It’ll go in the space between your fingers and the underside of your wrist on your affected side. The dye will travel through your lymphatic vessels so they’re easier to see.

Once your plastic surgeon sees the damaged lymphatic vessels, they’ll connect them to a nearby vein (see Figure 1). This lets the lymphatic fluid drain from the area.

![Figure 1. Connecting a damaged lymphatic vessel to a vein](image)

After your ILR procedure, your surgeon will finish your breast surgery as usual.
For the first 2 weeks after your ILR procedure

Your breast surgeon will give you instructions for caring for yourself after your breast surgery and axillary lymph node dissection. Follow their instructions and the instructions below.

- Avoid compressing or putting pressure on the area of your axillary lymph node dissection.
  - Choose loose clothing that doesn’t compress the area.
  - Don’t use large amounts of gauze or padding in your bra. A member of your care team will show you how much is safe to use.
- Don’t raise your affected arm more than 45 degrees. You can find how high 45 degrees is by placing your hand on your hip (see Figure 2). You can straighten your elbow, but don’t raise your arm past this height.
- Follow your breast surgeon’s instructions for doing range of motion exercises after breast surgery. They’ll give you the resource *Exercises After Your Mastectomy* ([www.mskcc.org/pe/exercises_after_mastectomy](http://www.mskcc.org/pe/exercises_after_mastectomy)). Remember not to raise your affected arm more than 45 degrees while you’re doing them.
- If fluid starts to collect in your armpit, call your breast surgeon right away. The fluid may cause swelling in a small, defined area (like a golf ball) or puffiness in a larger area. A member of your care team will tell you what to look out for.

Your urine (pee) and the skin between your fingers and under your wrist might be discolored after your procedure. This is from the dye your plastic surgeon injected. The color will fade over a few days.
Starting 2 weeks after your ILR procedure

Starting 2 weeks after your surgery, you don’t need to follow any range of motion restrictions. You can raise your arm above 45 degrees. If your breast surgeon gives you other instructions, follow their instructions instead.

If you have any questions, contact a member of your healthcare team directly. If you're a patient at MSK and you need to reach a provider after 5:00 PM, during the weekend, or on a holiday, call 212-639-2000.

For more resources, visit www.mskcc.org/pe to search our virtual library.