Blood pressures and IVs after mastectomy

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As part of breast cancer surgery, many women undergo removal of some or all of the lymph nodes in their armpit (axilla). Removal of lymph nodes and radiation increase one’s risk for lymphedema, which is an abnormal buildup of lymph fluid. This article discusses recommendations to reduce this risk.

Dear OncoLink “Ask The Experts,”

As a breast cancer survivor, I have always been told to not have blood pressures, finger sticks, or blood draws on the arm on the side of my mastectomy. I can understand not doing it for a certain amount of time, to allow time for healing. However, is that for the rest of my life, or is there a set time after the surgery that the arm may be used? Your assistance is greatly appreciated.

Many women go to great lengths to abide by the recommendation of not having blood draws and blood pressures on the side of breast cancer surgery. They may also have considerable anxiety when they are unable to follow these or accidentally use the affected arm for a procedure. Let’s look a little deeper at the recommendations and the science behind them.

What does the lymph system do?

The lymph system consists of lymph nodes and vessels that run throughout your body. The lymph system helps to manage fluid volume and fight disease. Lymph nodes and vessels drain excess fluid from the entire body and return it to the blood near the heart. Lymph nodes filter viruses, dying cells, foreign matter, and bacteria to fight infection. When lymph nodes are removed or damaged, the lymph system may not work as well or has to work harder to do its job. This can lead to the development of lymphedema, which is an abnormal buildup of fluid in the affected area.

What areas can be affected?

The affected arm (on the side of surgery or radiation), breast or chest wall can swell due to lymphedema.

Who should follow risk reduction recommendations?

The goal is to reduce your risk of developing lymphedema. Having a mastectomy alone does not put you at risk for lymphedema. The risk comes when you have lymph nodes removed or damaged. If you had any of the following, you should take precautions to reduce your risk of lymphedema:

- Removal of all lymph nodes in the underarm area, which is called an axillary node dissection (or AND).
- Removal of a limited number of “key” lymph nodes from the underarm area, which is called sentinel lymph node biopsy (or SLNB).
- Having radiation to the chest wall and armpit after surgery.

If you have had any of these procedures, you would benefit from meeting with a lymphedema therapist to learn about precautions to reduce your risk of developing lymphedema and when to notify your medical providers.

What if I didn't have these 3 procedures?

If you had a mastectomy without having any lymph nodes removed and did not have radiation, you do not need to follow these precautions. If you had a prophylactic mastectomy due to a genetic abnormality or family history, you do not need to follow these precautions as your lymph nodes were not removed.
What precautions should I take to reduce the risk of developing lymphedema?

- Know your arm. It is normal to have some swelling after surgery. However, continued swelling or any new swelling should be reported immediately to your medical team, even years after your surgery. Even a little swelling is important to report - you might just notice your jewelry or clothing is tighter or your arm feels a little heavier.
- Try to maintain a healthy weight. Being overweight greatly increases your risk for lymphedema. To get started on a weight loss plan, talk with your medical team about a safe diet and exercise plan and meet with a Registered Dietician to talk about meal planning.
- Avoid cuts/scrapes in the arm on the side of your surgery. Take precautions when doing things that could result in a cut – like wearing gloves and long sleeves to garden. If you do get a cut, wash the area with soap and water and do your best to keep the area clean and free of infection. Use insect repellent to prevent bug bites.
- If you notice any sign of infection, like sudden swelling, redness, warmth or fever, report this to your medical team right away.
- Exercise. Improving your fitness reduces your risk for lymphedema and helps you regain strength. Be sure to get approval from your medical team first and seek out a physical therapist who specializes in treating people with cancer.
- Avoid constriction or increase of blood flow to the area. Constriction can occur with tight clothing or jewelry or even carrying a heavy handbag on that arm. Increased blood flow can be caused by sudden intense exercise or extreme temperatures, such as a hot tub or hot shower.
- Blood Pressure: Many organizations, like the American Cancer Society and the National Lymphedema Network, advise survivors to avoid blood pressure on the surgery side, if possible. However, there is not good research to support this recommendation and several studies have found it has no effect on arm swelling. Some experts suggest that if the opposite arm is unavailable, you can have your blood pressure taken in the surgery arm using a manual blood pressure cuff and stethoscope as this does not pump as tight and is quicker.
- IVs: It is recommended that IVs are placed in the arm on the opposite side of your surgery, if possible. There is not good research to show that IVs contribute to lymphedema, however there is research showing that development of an infection (cellulitis) can contribute to lymphedema. Therefore, you should request that IVs get placed on the non-affected side, if possible. If there is a need to place an IV on the affected side, work with your medical team to keep the area clean and free of infection. You should also avoid having injections on this side as well. If an injection is needed, you should discuss the risks and benefits with your provider and make a decision based on your situation.

What if I have had lymph nodes removed or radiation on both sides?

It may not be a big deal to have a blood pressure taken on the opposite side of your surgery. But, if you had surgery or radiation on both sides or have another reason to not use one side (a PICC line, for example), it gets a little more complicated. The American Cancer Society and the National Lymphedema Network both recommend having blood pressure taken using a manual cuff and stethoscope. This avoids the high pressure squeezing that happens with a blood pressure machine, which often occurs a few times before giving a reading. Many organizations recommend using the thigh to take blood pressure. This requires a BP cuff that is large enough to wrap around the thigh in order to get an accurate reading. It is important to note that your thigh blood pressure should be taken lying down and that the upper number (systolic) is typically 10-40 mm Hg higher in the leg compared to the arm.

Do I need to follow these recommendations forever?

Your lymph nodes cannot grow back, so your lymph system will always be impaired. Because of this, you are at risk for developing lymphedema and should follow these recommendations for life.

References

National Lymphedema Network: https://lymphnet.org/

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