

Lymphedema Risk Reduction

The surgical procedures performed on individuals affected by breast cancer may be mastectomy, partial mastectomy, or lumpectomy. Along with the actual breast surgery for cancer, axillary lymph nodes are removed and/or radiated. As a result of axillary lymph node clearance, the normal lymphatic drainage from the extremity is impaired, and some patients experience the onset of lymphedema. Accumulated lymph in the edematous arm provides a rich culture medium for bacteria, which makes lymphedematous tissues very susceptible to infections. Simple injuries and puncture wounds can develop into local or generalized infections that may produce further lymphatic destruction and blockage. To reduce the risk of these postoperative complications, most patients are advised to not have blood pressure readings taken on, intravenous infusions in, or blood samples taken from, the arm on the operated side.



Very little published data are available to document the exact risk of lymphedema from performing blood pressure readings, blood draws and injections on the affected extremity. Lack of research and normal variations in each individual's lymphatic system (numbers or sizes of lymph nodes) make it difficult to quantify personal risk from each triggering factor.

While further research is needed, healthcare professionals are encouraged to minimize the risk of lymphedema by taking blood pressure readings, blood draws and injections on the non-affected limb whenever possible. In patients with breast cancer on both sides, these procedures should be performed on the leg or the foot. If this is not possible, the procedure should be done on the non-dominant arm. If one side had no lymph node removal, the arm on that side should be used, regardless of whether it is the dominant arm. In an emergency, however (such as a car accident), and if an intravenous line must be started, medical professionals must be allowed to do what they need to do to start the intravenous line as soon as possible.



If a port is present, blood draws should be taken directly from there. In patients with “bad” veins, good hydration and some form of heat (heat pads, warm water) help to dilate the veins prior to cannulation.

To avoid the onset of lymphedema, or infections in existing lymphedema, health care professionals should follow expert consensus regarding best practices to avoid lymphedema, and inform patients with breast cancer about their risk factors for developing lymphedema. Until further research is available, the National Lymphedema Network’s Position Statement on [Risk Reduction Practices](#) should be used to deliver information to patients.

Not all medical professionals are familiar with the precautions for avoiding lymphedema, so patients have to be especially watchful advocates for themselves. The National Lymphedema Network makes available a [Lymphedema Alert Bracelet](#). Wearing this bracelet increases the odds of remaining lymphedema free and at the same time educates the medical community.

Further reading on the topic is available here:

[National Lymphedema Network](#)

[National Cancer Institute](#)

[Danish Cancer Society](#)

[Mayo Clinic](#)

[American Cancer Society](#)

[Oncology Nursing Society](#)

[BreastCancer.org](#)

[National Institute of Health/PubMed](#)

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