Welcome Cancer Newsline your source for news on cancer research, diagnosis, treatment, and prevention. I'm your host, Lisa Garvin. Dr. Schaverien, everyone thinks of lymphedema being closely associated with breast but there are other diseases and other limbs that are affected by lymphedema.

Yeah, lymphedema is a chronic condition involving swelling of the extremities. It causes profound psychosocial impairment to patients as well as function impairment in terms of use of the extremity and their gait when they are ambulating. It also can cause orthopedic problems with the limbs and of the joints and the ligaments. And in addition, in rare cases, it could also secondarily cause cancer of the extremity as a condition by itself. Lymphedema is very common in the Western population. Most commonly following cancer surgery in particular removal of the lymph nodes and radiation therapy. It affects approximately 16% of cancer survivors. In the general population, one in the 1,000 people are affected by lymphedema. And in the U.S., it’s estimated there are 200,000 new cases of lymphedema a year. The most common association is with breast cancer treatment whereby approximately 40% of patients will develop lymphedema after axillary lymphectomy. However, it also affects other patients with cancer. It affects those following sarcoma surgery, melanoma surgery, and genital urinary surgery amongst others. It can affect both the upper and lower extremity.

Because the lymph nodes are clustered like close to the trunk where the trunk and the extremities meet. So you have clusters under your arms and then again clusters in your groin, correct?

That’s correct, Lisa. So the lymphatic vessels in the extremities will ramify through the lymph nodes in the groin or in the axillae. This is because the lymph nodes have an immune surveillance function and this is located in the lymph nodes. Removing these lymph nodes surgically, in particular, followed by radiation therapy causes a scar. And this causes an obstruction that prevents the lymphatics from healing across this scar and causes lymphedema.

Do you find that sentinel lymph node biopsies are helping you remove just the nodes that are affected instead of the entire group of nodes? Is that helping?

There is still a very low risk of lymphedema with sentinel lymph node biopsy. So that alone can cause lymphedema. However, it is reducing our incident of lymphedema. There have been some significant advances in breast cancer surgery recently towards less invasive axillary surgery. And this is certainly leading to reduction in patients developing lymphedema. In addition, here at MD Anderson we are doing targeted axillary surgery in order to try and avoid the numbers of patients that need to have all their lymph nodes removed as part of their cancer surgery and hence, reduce their instance of getting lymphedema. We're also looking at the effect of different radiation regimens such as hypofractionation in order to see whether this also reduces the incident of lymphedema in our patients.
So how many men would you treat and men are typically more affected down in their legs, correct?

Yes. So men can be affected by melanoma, genital urinary cancers, or sarcoma. Sarcoma alone, the instance of lymphedema can be up to 30%. So it is not popularly understood but many men silently suffer with lymphedema of the lower extremities.

And they possibly don't even know it's happening.

Well they do know it's happening. There is obviously some social stigma attached to it. It is also important to note that lower extremity lymphedema is more difficult to treat both with compression garments and surgically because of the high venous pressures. However, we still have successful treatments to offer them. Surgically. And we like to see these patients as early as possible to see whether they're candidates for surgery.

And you are an expert at lymphovenous bypass. Can you use that in lower extremities?

We do. And that can be a successful treatment for lower extremity lymphedema. In particular extremity, we do like to combine these surgeries. We like to combine lymphovenous bypass with vascularized lymph node transfer. This seems to be a more powerful technique than either alone. And as lower extremity lymphedema is harder to treat, it appears these combined strategies are more effective.

So patients, men and women, whether it's their arms or their legs, what sort of symptoms should they be reporting to their doctor?

So patients will normally first notice discomfort in the extremity shortly followed by an increase in volume. Untreated this will be progressive. It is important that patients present for evaluation. We will have them reviewed early by lymphedema physical therapists, start decongestive therapy, and compression garments in order to manage the lymphedema. About a third of these patients will have relief of their lymphedema by compression alone by 5 to 6 months. Of those that do not have resolution of lymphedema by that time are candidates for surgery.

Great. Thank you very much.

Thank you.

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