

Liposuction may ease limb swelling in cancer patients

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(HealthDay)—Liposuction may help people with lymphedema—a

painful, disfiguring swelling of the arms, hands, legs or feet.

Harvard researchers used the surgical technique to remove fat from just underneath the skin in three people with the condition. Two of the patients had [lymphedema](#) as a side effect of [cancer treatment](#). The other one had a naturally developing form of lymphedema.

In all three cases, there was improvement in the lymphedema after [liposuction](#), the researchers said. And the improvement appears to be more effective and lasting than expected. One patient has had more than five years of follow-up.

"Liposuction is extremely effective at removing fat from underneath the skin, which makes the arm or leg smaller," explained study author Dr. Arin Greene, director of the lymphedema program at Boston Children's Hospital.

"And the new data show that the surgery improves lymphatic flow and increases quality of life. It actually allows the underlying lymphatic system to move the fluid," he said.

But Greene did have a word of caution. "This is not a cure. It improves lymphatic flow, but people still need to take conservative measures, such as wearing [compression garments](#)," he noted.

Greene said cancer probably causes about 99 percent of lymphedema cases. Another 1 percent have it due to a developmental problem.

The reason people get lymphedema after cancer treatment is because when cancer spreads to lymph nodes, those nodes need to be removed. In this process, part of the lymph vessels attached to the node are also removed.

Lymph nodes and vessels are part of the body's immune system. When removed, the body's natural drainage system for lymph fluid is disrupted and fluid builds up, sometimes to extreme levels, according to the American Cancer Society. Radiation therapy also can damage nodes and vessels or cause scarring that blocks drainage.

Lymphedema can be very uncomfortable and cause a feeling of heaviness. Skin can feel tight. Wounds may heal more slowly, and lymphedema can cause reduced flexibility, the cancer society says.

About 200 million people have lymphedema worldwide, according to the study authors.

Treatment typically includes wearing compression garments and getting a special type of massage that helps promote fluid drainage.

The study patients who had liposuction only had the procedure on an affected limb. They didn't have liposuction on their hands or feet. However, the two patients who had liposuction on their arm also saw improvement in their hand, and the one who had liposuction on her leg had improvement in the lymphedema affecting her foot. Greene said this was unexpected.

He has several theories as to why liposuction was more effective than expected, though he emphasized that none are yet proven.

One theory is that by removing the fat, pressure is taken off of the remaining [lymph nodes](#) and vessels, allowing them to function better. Another theory is that the fat may make fluid, too, so removing it might mean less overall fluid.

Dr. Douglas Roth, chief of plastic and reconstructive surgery at Northern Westchester Hospital in Mount Kisco, N.Y., was impressed with the

study's results.

"As a plastic surgeon, I was taught to stay away from areas with lymphedema. The tissue is already compromised, making concerns about complications more significant. These areas need to be treated very, very carefully," said Roth, who was not involved with the study.

"But this is definitely a breakthrough in thinking about the treatment of this problem, and it's a brand new procedure that could be very helpful," Roth said.

He added that while the procedure hasn't been used for lymphedema in the United States, it has been used in Europe and Australia for about 10 years. Still, Roth said he'd want to see a larger trial on a U.S. population before he would consider it.

Greene said insurance covered all three procedures. Roth said insurance companies would likely pay for liposuction done for a medical reason, such as lymphedema. When done on a purely cosmetic basis, liposuction is about \$7,000 to \$9,000 for the surgeon's fee and the operating room time, Roth estimated.

The study was published Nov. 1 in the *New England Journal of Medicine*.

More information: Arin Greene, M.D., director, lymphedema program, Boston Children's Hospital, and associate professor of surgery, Harvard Medical School, Boston; Douglas Roth, M.D., chief, plastic and reconstructive surgery, Northern Westchester Hospital, Mount Kisco, N.Y.; Nov. 1, 2017, *New England Journal of Medicine*

To learn more about lymphedema, visit the [American Cancer Society](#).

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