Let's talk lipedema

International leader in management of disorder highlights need for greater awareness

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Liposuction using super tumescent local anesthesia is an important advance for the safe and effective treatment of lipedema, but appropriate diagnosis is the first step to successful management of this disorder, which causes significant morbidity and is more common than generally recognized, says Louis Habbema, M.D., Ph.D.

In lipedema, there is abnormal accumulation of subcutaneous fat that can be accompanied by mild edema in the extremities. Women, almost exclusively, are affected by the condition, which occurs bilaterally and symmetrically, and most often develops in the upper legs. The lower legs and upper arms may be involved, but lipedema rarely affects the lower arms, and fat accumulation in lipedema never occurs in the trunk or face.

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Some patients develop lymphedema as well, probably due to compression of the lymph vessels. Lipedema patients also may show anatomically abnormal lymph vessels, Dr. Habbema says.

Due to a low awareness of the condition among physicians, patients seeking help may simply be counseled to lose weight and/or offered liposuction using conventional techniques. Although women with lipedema may also suffer from obesity, the abnormal fat that accumulates in lipedema is very resistant to conventional weight-loss measures, and it is destined to accumulate again after removal with conventional liposuction, says Dr. Habbema, who has been at the forefront of developing treatment for lipedema and efforts to increase awareness about the condition.

"Fat accumulation in lipedema cannot be controlled or eliminated through diet, and the swelling and aching associated with the condition are worsened by exercise. Women attempting to lose weight by these methods will simply lose fat from areas of the body that are not affected by lipedema, including the face, the breasts and the trunk, while the lipedema gets progressively worse," says Dr. Habbema, a dermatologist specializing in cosmetic medicine and founder, Medical Centre 't Gooi, Amsterdam.

"Our experience with around 800 women shows that lipedema treatment with circumferential liposuction performed using a large volume of tumescent anesthesia safely and effectively removes the fat and improves patient symptoms," he says. "Early intervention is desired to hopefully prevent progression and improve quality of life. However, the doctor must first recognize the problem in order to offer the correct treatment."

ASSOCIATED MORBIDITY The morbidity associated with lipedema includes physical, psychosocial and functional consequences. In addition to having low self-esteem because of their appearance, affected women become frustrated and discouraged by the failure of their weight-loss efforts, and the psychological burden may be compounded for those who go from physician to physician seeking help, only to receive the same advice about diet and exercise that they have already tried and know doesn't work.

In severe cases, the enlarged extremities can cause mechanical sequelae, including mobility issues and friction-induced skin breakdown. Expansion of the subcutaneous compartment with fat also causes discomfort, tenderness or even severe pain, and the affected areas may be prone to easy bruising.

"Women who've enjoyed long walks may find they must stop after just 10 minutes because of their pain, and merely touching the surface of the skin can cause distress," Dr. Habbema says.

"In addition, the pain may be misdiagnosed as originating from some other musculoskeletal condition and lead women to undergo unnecessary diagnostic and surgical procedures that will have no benefit on their chief complaint."

SUPER TUMESCENT SUCCESS Liposuction using massive amounts of tumescent anesthetic solution allows safe and effective removal of the accumulated abnormal fat in patients with lipedema because the infiltrated solution is sufficient to surround all of the fat cells, facilitating fat removal while protecting other tissues, Dr. Habbema says.

Dr. Habbema

"The super tumescent technique minimizes the risk of injury to lymph vessels, which would result in worsening of the lymphedema component, and to a delicate network of fibrous septae that is present in patients with lipedema," he says.

Depending on the area being treated, as much as 10 L to 12 L of tumescent anesthetic solution is instilled. The solution is delivered very slowly to facilitate uniform distribution around all of the fat cells.

Since the liposuction needs to be performed circumferentially in one or multiple procedures and patients must cooperate in altering their body position, only local anesthesia is administered. Traditional power-assisted liposuction is used with a blunt cannula usually 3.0 mm in diameter that is moved from the back to the front.

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"Initially, it was thought that a smaller-gauge cannula might be safer, but even though the tip is blunt, a cannula with a small diameter has a knifelike quality and can damage the fibrous network," Dr. Habbema says.

NUMBER OF SESSIONS Depending on the volume of fat that must be removed, two or three sessions done at monthly intervals may be necessary to address circumferential treatment of the upper legs. Usually, the maximum volume of supernatant fat removed per session is 5 L to 5.5 L; however, the ultimate goal is to remove as much fat as possible in the treated area, because it appears that minimizing the amount of fat that is left behind will lower the risk of recurrence.

Post-liposuction care is routine per other liposuction procedures, and post-procedure sequelae are also the same, except that bruising and pain are more significant after treatment for lipedema because of the greater volume of fat removed.

"However, there is not any significant downtime, and women can expect to be mobile on the first day after the procedure," Dr. Habbema says.

Dr. Habbema is working on a paper about treatment of lipedema that will include data from his clinical experience. He also co-authored a review article on the topic (Langendoen SI, Habbema L, Nijsten TEC, Neumann HAM. *Br J Dermatol*. 2009;161(5):980-986).