



LUND
UNIVERSITY

A 28-year Single Institutional Experience of Complete Reduction of Extremity Lymphedema Using Suction Assisted Lipectomy

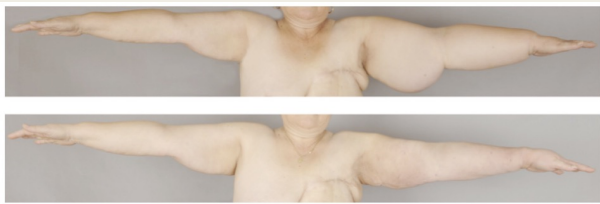
HÅKAN BRORSON, M.D., PH.D., DEPARTMENT OF CLINICAL SCIENCES IN MALMÖ, LUND UNIVERSITY, PLASTIC AND RECONSTRUCTIVE SURGERY, SKÅNE UNIVERSITY HOSPITAL, MALMÖ, SWEDEN
PROFESSOR, SENIOR CONSULTANT Email: hakan.brorson@med.lu.se Cellular: +46-706-463838

Conclusion

SAL is effective for treatment of chronic lymphedema in patients who do not respond to conservative treatment. Removal of the hypertrophied adipose tissue leads to complete reduction. Constant use of compression garments maintains the outcome.

Purpose

Absent lymph flow and chronic inflammation leads to excess subcutaneous adipose tissue deposition. Chronic non-pitting lymphedema does not respond to conservative treatment or microsurgical procedures because they do not target the adipose tissue. Removing the adipose tissue using suction assisted lipectomy (SAL) seems thus to be a logic treatment strategy.



A 57-years-old woman with a non-pitting secondary lymphedema of 4 235 ml since 5 years following breast cancer treatment. Complete reduction 6 months after liposuction.



A 45-years-old woman with a heavy pitting secondary leg lymphedema of 25 650 ml since 8 years following treatment of a cervix cancer (left). After conservative treatment the lymphedema was reduced to 5 850 ml and non-pitting before liposuction (middle) Postoperative result 3 years after liposuction with complete reduction (right).

Material and Methods

Arms: 190 women, mean $\pm$ SEM age of 62 $\pm$ 0.8 years, with a duration of arm swelling of 8.6 $\pm$ 0.5 years underwent SAL. Age at breast cancer operation, interval between breast cancer operation and lymphedema start, and duration of lymphedema were 51 $\pm$ 0.8 years, 2.8 $\pm$ 0.4 years, and 8.6 $\pm$ 0.5 years respectively.

Legs: 128 patients with a mean age of 49 $\pm$ 1.4 years and with a duration of leg swelling of 13 $\pm$ 0.9 years underwent SAL. There were 64 primary (PL) and 64 secondary lymphedemas (SL) following cancer therapy. Age at cancer treatment and interval between cancer treatment and lymphedema start were 2.5 $\pm$ 0.7 years and 42 $\pm$ 1.7 years respectively. Age at onset of PL was 10 years.

Results

Arms: Preoperative mean excess volume was 1404 $\pm$ 52 ml. Postoperative reduction was 104 $\pm$ 2.0% at 3 months and 117 $\pm$ 2.1% at 1 year, and more than 100% during 28 years' follow-up.

Legs: Preoperative excess volume was 3580 $\pm$ 153 ml. Postoperative reduction was 82 $\pm$ 2.3% at 3 months and 101 $\pm$ 2.3% at 1 year, and more than 100% during 23 years' follow-up.

