Introduction: According to estimates, 200 million people suffer from lymphedema worldwide and 30,000 were reported in Austria. Most lymphedema occur secondary due to lymph node dissection in the axilla, groin or pelvic region, radiation or chemotherapy as a part of oncological treatment. Especially in breast cancer patients, every fifth woman develops lymphedema of the arms. With the technical development and the progress in the field of supermicrosurgery, plastic and reconstructive surgeons can significantly improvement the symptoms of the lymphedema patients, by performing lympho-venous anastomoses (LVA) and vascularized lymph node flap transplantation (VLNT). We present our surgical experiences and results in patients with lymphedema in cooperation with complex decongestive therapy (CDT).

Material and Methods: A total amount of 78 patients (5 male) with lymphedema were treated with LVA and / or VLNT. Eight female and one male patients suffered under primary lymphedema. On average, three LVAs were performed on each patient under 50 times magnification microscope with 11.0 Ethilon sutures. In two patients VLNT were performed. In all cases pre- and postoperative photo documentation as well as measurement of the affected extremity were carried out.

Results: In all cases reduction of tension and the circumference up to 30% were evaluated. Postoperatively 12% (n = 10) of the patients did not need any further compression therapy. The remaining patients needed stockings with a lower compression class than preoperatively. Seven patients reported lymphedema related pain (VAS between 3 and 8) of the affected extremity, which postoperatively disappeared. Two patients had complications: a revision had to be performed on the fourth postoperative day because of a hematoma, in the other case a lymph seroma at the groin harvest site was surgically revised.

Conclusion: In combination with pre- and postoperative CDT, microsurgical lymph therapy improved the chronic symptoms of lymphedema, by reducing the tension, pain and the circumference of the affected extremities.