Surgical Treatment of Lymphedema with Microvascular Lymph Node Transplantation: Preliminary Results

Nikolaos A. Papadopulos, MD, FACS

Professor of Plastic Surgery
Dept. of Plastic Surgery & Hand Surgery
University Hospital rechts der Isar, Munich Technical University
Ismaningerstr. 22, D-81675 Munich, Germany

Autologous Lymph Node Transplantation has been performed since many years, although different therapies for lymphedema have been described almost a century before! However, after the continuous development and refinement of techniques and instruments Lymph Node (LN) Transplantation, gain more and more acceptance under plastic surgeons, especially by large lymphedema volumes (III°), since the results are very promising.

In order to evaluate the usefulness of LN Transplantation we started to perform this procedure for lymphedemas, grade II and III, after breast cancer procedures, as well as other oncologic ablative operative indications in the perigenital and extremities' areas and lymphadenectomy. 6 patients have been examined clinically preoperatively as well as 6 months postoperatively. Further, 3D-Laser scanning has been performed for volumetry, as well as a lymphangiography.

Almost no complications occurred. A significant pain reduction has been reported post operatively, although no relevant regression of the lymphedema was shown: only ca. 10-15%! The donor-site morbidity was very low.

LN transplantation is a very promising procedure for the treatment of lymphedema in our oncologic patients. Therefore we intent to continue on improving our learning curve, as well as to work on the further development and refinement of this method.