

# The Optimal Distal Recipient Site For Vascularized Submental Lymph Node Flap in the Treatment Of Breast Cancer Related Lymphedema: Dorsal Wrist Vs. Volar Wrist.

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## Abstract:

### Background:

The distal placement of Vascularized lymph node is an effective method in the treatment of Breast Cancer Related Lymphedema. Despite the majority of patients' concerns are functional, some aesthetic concerns may be raised due to placement of the flap in an exposed area. Our objective is to compare the functional improvement of the lymphedematous limb after the placement of the Vascularized Lymph Node in the dorsal and volar Wrist aiming to place it in a less visible area.

### Methods:

An institutional and ethically approved prospective study for patient with Obstructive Breast Cancer Related Lymphedema receiving submental vascularized lymph node to the volar or dorsal wrist with one year follow up. Functional outcomes of interest are the clinical improvement in limb circumference, incidence of Cellulitis, and the quality of life.

### Results:

A Total of 15 patients had the distal wrist as a recipient site were included, 7 in the dorsal and 8 in the volar wrist. The mean age, Body mass index, and Symptoms duration were 54 years, 25 kg/m<sup>2</sup>, and 29 months, respectively. There was an overall significant downgrade of lymphedema and improvement of limb circumference, reduction in cellulitis incidence, and improvement in the quality of life. Compared to the volar, the dorsal wrist Recipient site had a significant superior improvement in limb circumference and better quality of life in three out of the five domains.

### Conclusions:

Distal Placement of vascularized lymph node in the treatment of Breast cancer related lymphedema is effective. Despite the Dorsal wrist has a superior functional outcome, both options should be discussed with the patient.