

CHANGES IN LYMPHATIC FUNCTION AFTER COMPLEX PHYSICAL THERAPY FOR LYMPHEDEMA

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ABSTRACT

Twenty-two extremities of 19 lymphedema patients (6 arms, 16 legs) were treated by 2 weeks of complex physical therapy (CPT) and self home maintenance therapy (bandage/wearing of elastic garment and exercise). In addition to the clinical response of volume reduction before and 3 months after CPT, we analyzed the functional changes of the peripheral lymphatic system by use of lymphoscintigraphy (LS).

Before CPT, the main LS findings of lymphedema included dermal backflow (100%), absent or faintly visualized regional lymph nodes (95.5%), presence of collateral lymphatic vessels (68.2%), and no or barely visualized lymphatic vessels (27.3%). LS findings suggesting improved lymphatic function after CPT were a decrease in dermal backflow (72.7%), an increase in radioisotope uptake by lymphatic vessels (27.3%), and an increase in radioisotope uptake by lymph nodes (9.1%). 81.8% of limbs showed improved lymphoscintigraphic findings and no change in 9.1%. In the others (9.1%), LS findings appeared worse. There was, however, no correlation between LS "improvement" and the amount of limb volume reduction.