

**LYMPHATIC CLEARANCE OF THE HUMAN SKIN IN PATIENTS
WITH ACUTE DEEP VEIN THROMBOSIS USING A NOVEL
FLUORESCENT TECHNIQUE**

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ABSTRACT

The purpose of this study was to investigate lymphatic clearance of the human skin in patients with acute deep thrombosis of the femoral vein. In 13 patients with deep vein thrombosis and no other cause for swelling of the limbs, lymphatic clearance of the skin at the foot was measured. Ten microliters of fluorescein isothiocyanate-dextran 150,000 were injected intradermally and the fluorescent light intensity of the deposit measured 10 min and 24 hours after injection by window densitometry. In addition, intralymphatic pressure was measured by the servo-nulling system. The results were compared with a sex- and age-matched control group. Fluorescent light intensity decreased by 23.8 ± 12.3 arbitrary units or by a factor of 1.8 ± 0.5 in patients with DVT after 24 hours, which was significantly less than in healthy controls (33.7 ± 8.9 arbitrary units or by factor 5.0 ± 4.1 , $p < 0.013$). Intralymphatic pressure was not different between the two groups. These results indicate that lymphatic clearance is significantly reduced in the acute phase of deep venous thrombosis.