

**RELATIONSHIP BETWEEN LYMPHOSCINTIGRAPHY AND
CLINICAL FINDINGS IN LOWER LIMB LYMPHEDEMA (LO):
TOWARD A COMPREHENSIVE STAGING**

A.P. Pecking, J.L. Albérini, M. Wartski, V. Edeline, R.V. Cluzan

Department of Nuclear Medicine, Centre René Huguenin, Saint-Cloud, France

ABSTRACT

Although radionuclide lymphoscintigraphy (RNL) is widely used diagnostically for patients with lymphedema (LE), it has not been utilized for LE staging which is still based upon clinical findings. The aim of this work is to establish whether the results of both conventional RNL and fusion imaging obtained from hybrid detectors may be used for a comprehensive clinicoimaging staging in LE. Radiolabeled nanocolloids (0.2 ml) were subcutaneously injected in 4,328 patients (23-78 years) with clinical lower limb LE and without venous disease. Patients were classified according to the ISL classification and had a minimal follow-up of 2 years. Images were taken 60 minutes after the injection as a whole body scanning and fusion images of functional SPET and anatomical CT. Clinical and RNL results were not in accordance, and a specific RNL staging was established. The association of clinical and functional staging yields a new method to grade LE patients, and this staging correlated with treatment efficacy. RNL is an important tool in lymphology, and its association with the clinical evaluation offers a new grading system which may be able to delineate patients with good prognosis, patients at risk for a complex decongestive physiotherapy (CDP) failure, and patients who may benefit from other therapeutic protocols.