

**MORPHOLOGIC AND FUNCTIONAL CHANGES OF THE
MICROLYMPHATIC NETWORK IN PATIENTS WITH
ADVANCING STAGES OF PRIMARY LYMPHEDEMA**

C. Allegra, R. Sarcinella, M. Bartolo, Jr.

Department of Angiology, S. Giovanni Hospital, Rome, Italy

ABSTRACT

Using fluorescent microlymphography, we examined the morphology and functional characteristics of the microlymph-vascular network in 36 subjects including 9 patients with "compressible" lymphedema (Group I), 14 with minimally compressible lymphedema (Group II), 9 with noncompressible lymphedema (Group III), and 4 healthy individuals.

As lymphedema progressed from early to advanced stages (Group I-III), an increasingly greater lymphatic capillary density and diameter were depicted and eventually fibrosis/sclerosis with lymphangiectasia, fragmentation and a gradual decrease in the number of microlymphatics. Concomitantly, there was a prolongation in transport and disappearance of fluorescent dye and a progressive increase in endolymphatic and interstitial hydrostatic pressures.