ABSTRACT

This study examines the lymphatic drainage after injection of a radiotracer in the upper medial quadrant of the right breast in young healthy female subjects. Most studies concerning lymphatic drainage pathways have focused on the upper lateral quadrant of the breast because of the high incidence of carcinoma in this quadrant while the drainage pattern of the medial quadrant has been less studied. We injected radiotracer (Human Serum Albumin labeled with 99m technetium) subdermally into the upper medial quadrant of the right breast tissue of 33 young healthy female volunteers and obtained static images with a scintillation camera briefly after injection and approximately one hour after injection. We identified lymphatic pathways in 82.8% of our subjects, lymph nodes in 79.3% and in 3.4%, a sentinel lymph node was found in the internal mammary chain. In early images, lymph nodes were visualized in 65.5% of subjects while in 17.2% of subjects, lymphatic vessels only appeared on later images.