

**LYMPHOGRAPHIA****UNUSUAL LYMPHATIC DRAINAGE PATTERN IN A PATIENT WITH LYPHEDEMA OF LOWER EXTREMITIES**

E. Laborda, P. Santesteban, E. Samaniego

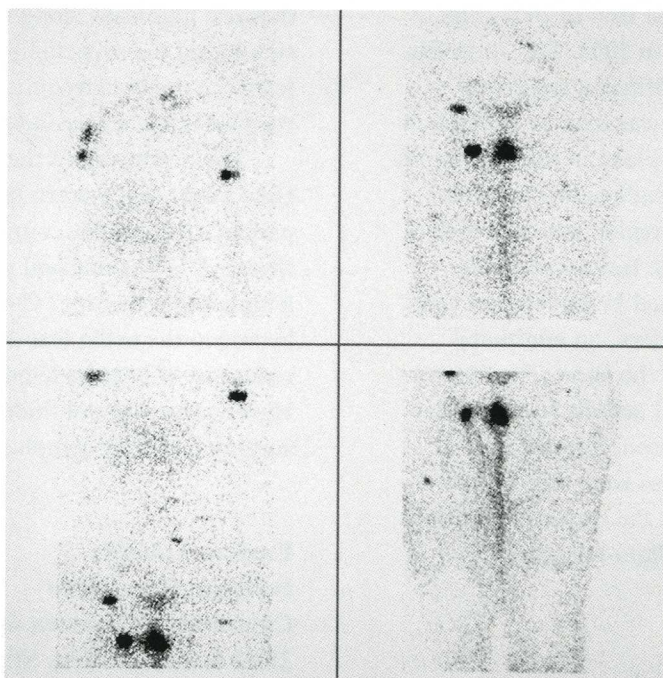
Servicio de Medicina Nuclear (EL,PS) and Servicio de Angiología y Cirugía Vascular, Instituto Oncológico, San Sebastián, Spain

**CASE REPORT**

A 43 year old female was treated 10 years earlier for a carcinoma of the uterus, including inguinal node resection. At the time of lymphoscintigraphy, she was clinically free

of malignancy and had presented with periodically controlled bilateral lymphedema of the lower extremities.

Nanocolloid-<sup>99m</sup>Tc (55.5 MBq) was injected in the first interdigital space of each foot on two successive occasions. Two series



*Fig. 1. Late scintigraphic images of the lower extremities after bilateral foot injection of radiocolloid (Right side, approximately lower abdomen to knee region displayed). Uptake in the axillae is detected in the upper border of the image (Left side, approximately neck to groin region displayed).*

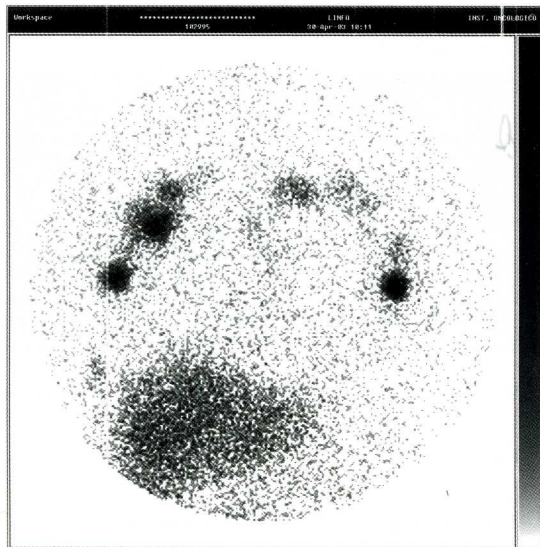


Fig. 2. Scintigram of the thorax. Axillary lymph nodes are displayed bilaterally despite absence of radiocolloid injection in the upper extremities.



Fig. 3. Late scintigram image a year later showing similar anomalous pattern of lymph drainage with axillary node display after only foot injection of radiotracer.

of images were obtained first in 2003 (Figs. 1 and 2) and the second in 2004 (Fig. 3). In Fig. 1, interstitial dermal diffusion typical of lymphatic obstruction was seen in addition to two foci of increased uptake in the right groin region. A faint line of radioactive foci was noted in the left thigh region and an isolated focus in the right thigh. Increased tracer uptake was also detected in the left and right axillary regions. Therefore, an additional scintigraphic image of the chest (Fig. 2) was obtained showing focal activity in the axillae (n.b. radiotracer had been injected only in the feet). Similar images were seen a year later (Fig. 3), although the camera limitations precluded optimal axillary imaging.

#### COMMENTS

This patient represents an unusual deviation of the expected lymph drainage from the lower extremities into truncal

thoracic pathways along with a pattern simulating the expected lymph drainage from the upper extremities but without the corresponding tracer injection.

The results raised the following questions. How might this pattern of drainage affect the patient's symptoms, course, and response to therapy? Is this unusual pattern a result of lymphedema therapy? Could this "functional" bypass to the axilla lead to amelioration or reduction of lymphedema symptoms? How do the unusual findings relate to prior surgery including lymph node resection?

**Enrique Laborda**  
**Instituto Oncológico**  
**Cuesta de Aldakoenea 44**  
**21012 San Sebastián, SPAIN**  
**Phone: 0034 943 32 80 03**  
**Fax: 0034 943 28 12 78**  
**E-mail: imasd@oncologico.org**