

# Extremity Lymphoscintigraphy

Updated

9/8/2024

- **Indications**

- To localize axillary, pelvic and inguinal lymph nodes in the setting of lymphedema.

- **Radiopharmaceutical:**

- 2 mCi Tc-99m sulfur colloid divided into 4 syringes (each containing 0.1 mL fluid)

- **Method of Administration:**

- If desired, administer 1 mL 1% lidocaine intradermally into the dorsal aspects of both hands and both feet.
- 5 mins after lidocaine administration, inject radionuclide intradermally at the same locations.

- **Patient Preparation:**

- Patients must remove any compression stockings for the duration of the exam.

- **Conflicting Examinations/Medications:**

- No Nuclear Medicine exams within the previous 24 hrs.
- No barium GI exams within the previous 24 hrs.

- **Pregnancy/Lactation:**

- Pregnancy status does not need to be assessed due to short  $t_{1/2}$ , low administered activity and extremely low radiation risks.
- Breast feeding mothers should discard breast milk for 24 hrs following Tc-99m Lymphoseek / sulfur colloid administration.

- **Imaging Technique:**

- Collimator - LEHR or LEAP
- Photopeak - 140 keV 20% window for Tc-99m
- Image Speed - 12 cm/min
- Matrix Size - 256 x 1024
- Zoom - none
- Patient Positioning - supine feet first with arms over head

- **Images/Views:**

- A Co-57 sheet flood source should be placed under the patient to outline his/her anatomy.
- Obtain anterior and posterior whole body images (from the fingertips to the toes) at 20 mins and 4 hrs after radionuclide administration.
- Obtain anterior and posterior whole body images at 5-6 hrs if liver activity is not visualized on the 4 hrs images.