

Hyperactivity in the low sternal region with Tc-99m sestamibi: possible cardiac origin.

SERVAIS FABIENNE, M.D., SERET ALAIN, Dr. Sc., BLOCKLET DIDIER, M.D., LENAERS ANDRÉ, M.D. AND SCHOUTENS ANDRÉ, M.D.

Service des Radioisotopes, Hopital Erasme, Université Libre de Bruxelles, Brussels, Belgium.

Corresponding author: Seret Alain, Service des Radioisotopes, Hopital Erasme, Université Libre de Bruxelles, route de Lennik 808, B-1070 Bruxelles, Belgium.
Telephone: 32-2-553304, telefax: 32-2-5556800, e-mail: aschoutresulb.ulb.ac.be.

ABSTRACT

Scintimammography performed with Tc-99m sestamibi in a 63-year-old woman with a history of mitral valve replacement and pulmonary hypertension demonstrated that the frequently observed sternal hyperactivity on anterior views could arise from the myocardium. Caution therefore should be taken before the diagnosing hyperactivity in the lower sternal region as a neoplastic involvement.

Fig. 1. Scintimammography 10 min after injection of 700 MBq Tc-99m sestamibi in two women. Diffuse (A) or focal (B) hyperactivity at the level of the sternum (arrow) was observed on the anterior planar views (10 minute acquisition).

Fig. 2. A woman with a history of mitral valve replacement and pulmonary hypertension was referred for scintimammography.

A) Anterior planar image 10 minutes after injection of 700 MBq Tc-99m sestamibi.

B) Anterior planar image 2 hours after injection.

C and D) Transverse reconstructed tomographic slices. Acquisition of 64 projections of 25 s in 64*64 matrix performed in the delay between the planar images.

Focal hyperactivity (arrow) at the lower sternal level was seen at 10 minutes (A) and could be diagnosed as right mammary lymph nodes involvement. Two hours after injection (B), however, this hyperactivity clearly delineated the cardiac chambers (right auricle and ventricle). This was confirmed further on the tomographic slices (C and D). Note that the liver was present on the left side of slice D.

References.

1. Kao, C H, Wang, S J, Liu, T J: The use of technetium-99m methoxyisobutylisonitrile breast scintigraphy to evaluate palpable breast masses. Eur J Nucl Med 21:432, 1994.

2. Khalkhali, I, Cutrone, J A, Mena, I G, et al.:Scintimammography: the complementary role of Tc-99m sestamibi prone breast imaging for the diagnosis of breast carcinoma. Radiology 196:421, 1995.

3. Taillefer, R, Robidoux, A, Lambert, R, Turpin, S, Laperrière, J: Technetium-99m-ses-tamibi prone scintimammography to detect primary breast cancer and axillary lymph node involment. J Nucl Med 36:1758-1765, 1995.

Figure 1

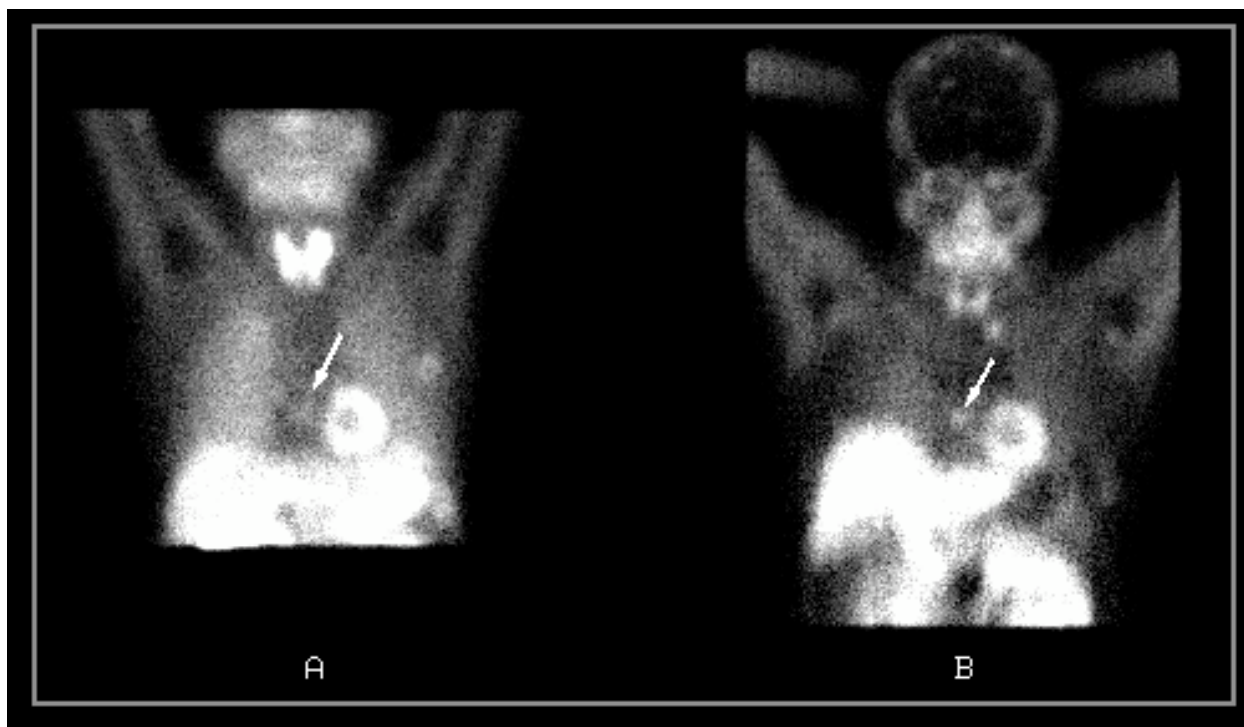


Figure 2

