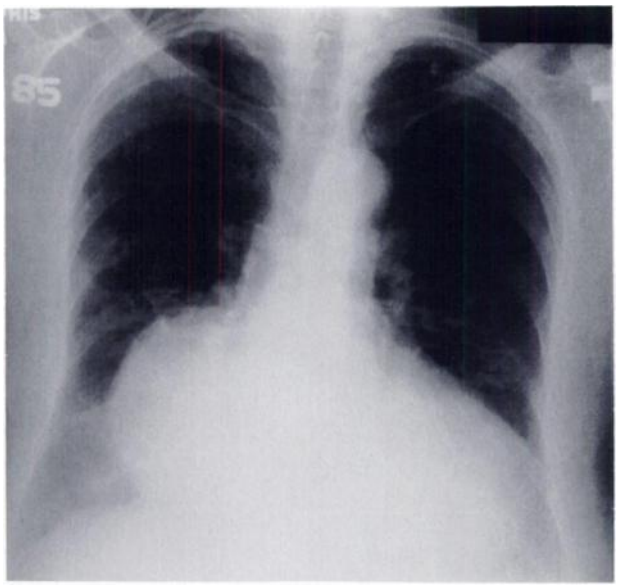

FIGURE 1
Chest x-ray showing mass in right lower lung field

ment. To verify this, a liver scan was requested. The flow study obtained with technetium-99m sulfur colloid 8 mCi i.v. showed photopenia in the mass lesion in the pulmonary arterial phase (Fig. 2A) but filled in during the aortic phase (Fig. 2B). These findings were compatible with systemic arterial blood supply to the lesion the differential diagnosis of which included a tumor. Liver scan was normal. At surgery, the mass was found to be supplied by internal mammary artery. Histologically the tumor was malignant fibrous histiocytoma. Another case was reported in the literature (*2*) wherein this tumor was supplied by bronchial arteries as demonstrated on bronchial arteriograms.

On the basis of our observation we conclude that the aortic blood supply of the pulmonary lesion should include the differential diagnosis of tumor and pulmonary sequestration and not the latter alone as reported by Kobayashi et al.

References

1. Kobayashi Y, Abe T, Sato A, et al: Radionuclide angiography in pulmonary sequestration. *J Nucl Med* 26:1035–1038, 1985
2. Case records of the massachusetts general hospital (Case 19-1985). *N Engl J Med* 312:1242–1252, 1985

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REPLY: While it is indeed possible that a tumor can be supplied by systemic blood supply, it is hard for us to agree with the main direction of the conclusion presented by Dr. Moinuddin concerning his extremely interesting case, i.e. that differential diagnosis of tumor and pulmonary sequestration is necessary, per se, when aortic blood supply of a pulmonary lesion is recognized. Only if the uptake increase of an abnormal mass in the aortic phase is unclear must both cases be considered. The reason for this is that it has been shown that the blood flow in sequestration is larger than that of tumor, because the feeding artery is thicker. This in turn results in a difference in radioisotope uptake between sequestration and tumor in radionuclide angiography. In fact, in Dr. Moinuddin's case there is little uptake by the tumor in the aortic phase and in this phase there is little difference between the tumor itself and the lung. On the other hand, in our case (*J Nucl Med* 26:1035–1038, 1985) uptake of sequestration increased on the aortic phase and we could clearly recognize the mass. Evidence suggests that there are few cases of sequestration with such poor blood supply that differential diagnosis from tumor would be necessary.

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Can a 24-Hour Image in Bone Scan Differentiate Osseous Metastasis From Benign Bone Disease?

TO THE EDITOR: In a recent report, Israel et al. (*1*) suggested that the ratio of lesion-to-nonlesion technetium-99m methylene diphosphonate ([^{99m}Tc]MDP) uptake at 4 and 24 hr might be a reliable method for separating metastatic lesions from degenerative changes in the vertebral column. On the other hand, Alazraki et al. (*2*) recently have commented on

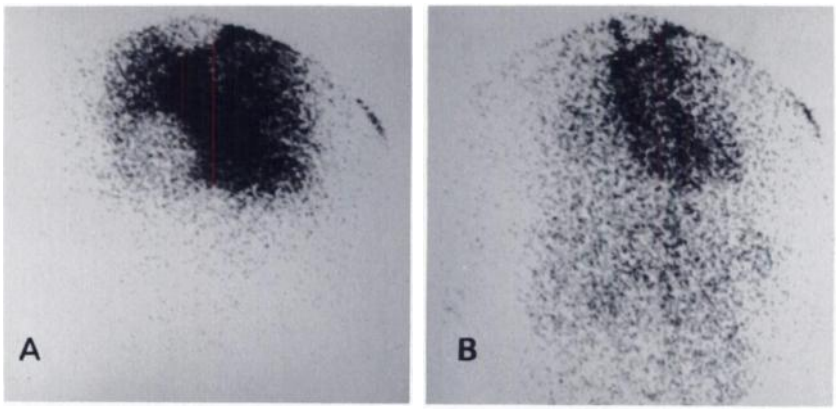

FIGURE 2
A: Dynamic flow study in pulmonary phase showing photopenia in mass. B: Aortic phase of flow study demonstrates systemic blood flow to mass