because of pathophysiologic reasons, most or part of the ^{99m}Tc-sulfur colloid administered might aggregate into macromolecules that would then be trapped in the lungs (*3*).

JOHN W. TURNER
IBRAHIM B. SYED
RONALD P. HANC
Wesson Memorial Hospital
Springfield, Massachusetts

REFERENCES

1. BRUNN P: A comment on the possibiilty of ^{99m}Tc-sulfur colloid retention in the lungs. *J Nucl Med* 15: 726–727, 1974

2. KLINGENSMITH WC: The author's reply. *J Nucl Med* 15: 727–728, 1974

3. TURNER JW, SYED IB, HANC RP: Lung uptake of ^{99m}Tc-sulfur colloid during liver scanning. *J Nucl Med* 15: 460–462, 1974

4. KLINGENSMITH WC, RYERSON TW: Lung uptake of ^{99m}Tc-sulfur colloid. *J Nucl Med* 14: 201–204, 1973

5. KEYES JW, WILSON GA, QUINONES JD: An evaluation of lung uptake of colloid during liver imaging. *J Nucl Med* 14: 687–691, 1973

6. GILLESPIE PJ, ALEXANDER JL, EDELSTYN GA: High concentration of ^{99m}Tc-sulfur colloid found during routine liver scan in lungs of patient with advanced breast cancer. *J Nucl Med* 14: 711–712, 1973

THE AUTHOR'S REPLY

None of the studies of increased lung uptake of ^{99m}Tc-sulfur colloid published so far conclusively excludes or establishes increased phagocytosis or macroaggregation as the responsible mechanism. As previously discussed (*1*), data from three studies using ^{99m}Tc-sulfur colloid favor increased phagocytosis (*2–4*). On the other hand, animal studies using colloidal carbon in comparatively large amounts have shown that burns and factors that promote coagulation increase the uptake of colloidal carbon in the lungs whereas heparin prevents this increased uptake (*5,6*).

The report by Turner, et al does not negate the phagocytic hypothesis since the autopsy was done 1 month after the demonstration of increased lung uptake of ^{99m}Tc-sulfur colloid and there is evidence for rapid interchange (within minutes) between the marginated macrophage pool and the circulating macrophage pool (*7*). Therefore, macrophages present in the pulmonary capillary bed at the time of the liver-spleen study may not have been present at the time of autopsy. In addition, macrophages can be difficult to identify histologically (*8*). Thus, further research will be necessary to determine the mechanism(s) responsible for increased lung uptake of ^{99m}Tc-sulfur colloid.

WILLIAM C. KLINGENSMITH III
The Johns Hopkins Medical Institutions
Baltimore, Maryland

REFERENCES

1. KLINGENSMITH WC: The author's reply. *J Nucl Med* 15: 727–728, 1974

2. STEINBACH HL: Pulmonary accumulation of ^{99m}Technetium sulfur colloid during liver scanning. *Tex Med* 68: 137–138, 1972

3. KLINGENSMITH WC, RYERSON TW: Lung uptake of ^{99m}Tc-sulfur colloid. *J Nucl Med* 14: 201–204, 1973

4. QUINONES JD: Localization of technetium-sulfur colloid after RES stimulation. *J Nucl Med* 14: 443–444, 1973

5. RAPAPORT FT, NEMIROVSKY MS, BACHVAROFF R, et al: Mechanisms of pulmonary damage in severe burns. *Ann Surg* 177: 472–477, 1971

6. HALPERN BN, BENACERRAF B, BIOZZI G: Quantitative study of the granulopectic activity of the reticuloendothelial system. I. *Br J Exp Pathol* 34: 426–440, 1953

7. MEURET G, HOFFMANN G: Monocyte kinetic studies in normal and disease states. *Br J Haematol* 24: 275–285, 1973

8. HIRSCH JG: Discussions. In *Mononuclear Phagocytes*, van Furth R, ed, Oxford, Blackwell Scientific, 1970, pp 47, 213

SCINTIGRAPHIC APPEARANCE OF NECROTIC LIVER METASTASIS IDENTICAL WITH THAT OF AMEBIC ABSCESSES

Concerning the diagnostic possibilities of gallium scanning of the liver, George F. Geslien, et al recently described the scintigraphic image of acute amebic abscesses. The same tracer distribution, however, can be found in other liver lesions as we ascertained in one of our patients. The striking similarity of the scintigraphic image with that of amebic abscesses encouraged us to report this case.

A 43-year-old woman presented with pain in the right hypochondrium with moderate fever of a few weeks' duration. Physical examination demonstrated hepatomegaly with palpable nodules. The liver function test showed elevated alkaline phosphatase and bilirubin values. The results of the immunoelectrophoresis were compatible with an infectious or parasitic process. Laparoscopic exploration showed hepa-