

"HEALING" OF A SPLENIC INFARCT

Richard P. Spencer

Yale University School of Medicine, New Haven, Connecticut

A case of splenic infarction showed resolution of the defect over a period of 17 days with some loss of splenic volume.

Splenic infarction is a disorder which can be suspected when sudden left upper quadrant pain develops or when predisposing diseases (such as sickle cell anemia or bacterial endocarditis) are present. Spleen scans have been used in the diagnosis of splenic infarction (1-3), although the filling defects shown are certainly not pathognomonic. The rate of healing of splenic infarcts is not known. In one report, a splenic defect, probably due to infarction, returned to normal 5 months later (3). We have had the opportunity to perform serial scans on a woman who had a splenic infarct.

CASE REPORT

A 52-year-old woman (Case 64-19) had a long history of rheumatic heart disease with bouts of congestive failure and episodes of atrial fibrillation. A mitral valvular prosthesis had been inserted 7 years before admission. She entered the hospital at this time because of the sudden onset of left upper quadrant pain. On admission she had a temperature of 100°F and rebound tenderness in the left upper quadrant. A posterior scintiphoto of the spleen (Fig. 1) using ^{99m}Tc-sulfur colloid revealed an organ about 13 cm in length with a band of decreased activity near the juncture of the upper and middle thirds. Repeat scintiphotos were taken 5 and 17 days later.

DISCUSSION

The patient had a history compatible with splenic infarction. The presence of an intrasplenic defect on radiocolloid scan and its nearly complete disappearance over a period of 17 days reinforced the diagnosis. The spleen was about 13 cm in length on the initial picture. We can approximate the size of the

defect as 1.5 cm from top to bottom and the width of the spleen as about 7 cm. The defect had a volume approximately 57 cm³. On the scintiphoto taken 17 days after the initial picture, the defect is essentially absent and the spleen has decreased in length by about 2 cm.

The resolution of the defect over 17 days and the probable slight decrease in splenic size may indicate that the reparative event is rapid in some cases and can be accompanied by loss of volume. In one case of splenic infarction we have studied (involving a large defect in a man with sickle cell trait) (4) healing occurred with little loss of total volume. Additional data are needed in order to quantify the apparent rate of resolution of splenic infarcts and the resultant loss of tissue volume.

ACKNOWLEDGMENT

This work was supported by USPHS CA 14969.

Received Oct. 24, 1973; original accepted Nov. 1, 1973.

For reprints contact: Richard P. Spencer, Dept. of Radiology, Yale University School of Medicine, 333 Cedar St., New Haven, Conn. 06510.

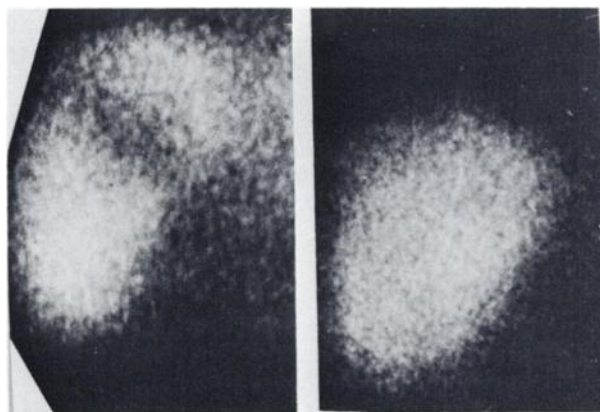


FIG. 1. Posterior scintiphotos taken 17 days apart. Original view (left) showed spleen to be 13 cm in length.

REFERENCES

1. NELP WB, KUHN IN: Splenic infarction diagnosed preoperatively by photoscanning. *JAMA* 197: 368-371, 1966
2. ALARCON-SEGOVIA D, MAYORGA-CORTES A, GONZALEZ-JIMENEZ Y, et al: Diagnosis of splenic infarction by scintillation scanning with Hg²⁰³-bromomercurihydroxypropane (Hg²⁰³-BMHP). *Am J Roentgenol Radium Ther Nucl Med* 109: 761-763, 1970
3. VAGENAKIS AG, ABREAU CM, BRAVERMAN LE: Splenic infarction diagnosed by photoscanning. *J Nucl Med* 13: 563-564, 1972
4. O'BRIEN RT, PEARSON HA, GODLEY JA, et al: Splenic infarct and sickle (cell) trait. *N Engl J Med* 287: 720, 1972