

SCINTIPHOTOGRAPHIC DEMONSTRATION OF RUPTURE OF AN ACCESSORY SPLEEN

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The spleen has been described as the intraabdominal organ most vulnerable to nonpenetrating abdominal trauma (1). Usually the diagnosis of splenic rupture is obvious and treatment immediate. However, delay between injury and surgery of more than 24 hr in 25% of cases and a 20% incidence of delayed splenic rupture occurring at any time up to 2 years have been reported (2,3). Delayed rupture follows formation of a subcapsular hematoma which then may resorb, liquefy and form a cyst, or enlarge and rupture (4).

Roentgen findings of ruptured spleen include fracture of a lower left rib, gastric dilatation, medial shift of the gastric air bubble, progressive enlargement of splenic mass, loss of splenic outline due to continued bleeding, and obliteration of the left costophrenic pleural angle (5). A left lateral decubitus film with barium filling the stomach has been shown to be useful diagnostically as has splenic arteriography (6,7).

Spleen scanning has been used to demonstrate

splenic cyst, to evaluate left upper quadrant masses, to search for accessory spleens, and to follow patients treated for lymphoma and leukemia (8). Splenic infarcts are demonstrable, and recently splenic rupture and splenic abscess have been shown (9-12). The spleen scan is a simple, safe, speedy method for demonstration of splenic rupture which may, when positive, obviate the need for abdominal arteriography and which offers an alternate means of study in those persons allergic to contrast media.

An unusual instance of rupture of an accessory spleen is presented.

CASE REPORT

The patient fell against the point of her dresser the evening of admission injuring her left upper abdomen. Examination on admission disclosed tender-

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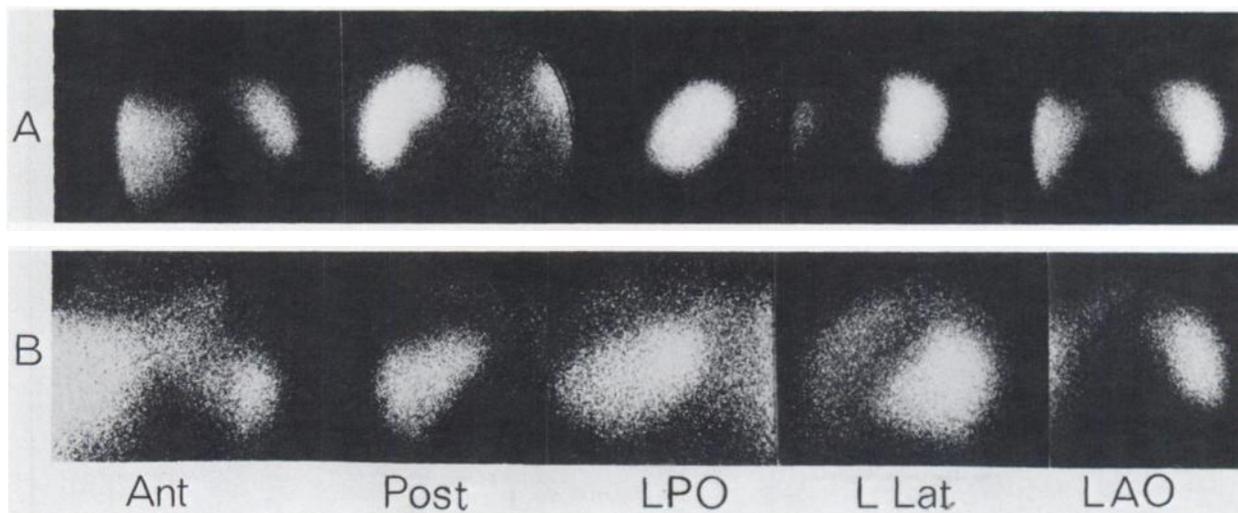


FIG. 1. A is normal spleen scan showing, from left to right, anterior, posterior, left posterior oblique, left lateral, and left anterior oblique views. B shows, from left to right, area of decreased

activity on anterior view, suggestive of splenic rupture, with normal posterior, left posterior oblique, left lateral, and left anterior oblique views.

ness in the left upper quadrant of the abdomen. Hematocrit was 9.3 gm. An admission chest roentgenogram revealed left hemidiaphragm splinting without rib fracture while an abdominal x-ray series was suspicious for splenic rupture. During a short period of observation, the patient failed to show improvement, and a spleen scan was obtained. This was interpreted as abnormal and suggestive of splenic rupture on the anterior scan (Fig. 1B). The posterior and lateral scans were normal. At surgery a ruptured anterior accessory spleen was found. The patient's primary spleen, situated posteriorly, was intact.

SUMMARY

A case of rupture of an accessory spleen demonstrated on the spleen scan is presented. Spleen scanning is advocated in those instances of suspected but not clinically established splenic rupture because it can eliminate the need for arteriography when positive. It may also offer an alternative means for establishing a diagnosis in persons allergic to contrast media.

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