We report 2 cases of torsion of the wandering spleen that illustrate the roentgenologic features of this unusual condition. These are an abdominal mass, usually in the left flank or pelvis; absence of the splenic shadow beneath the left diaphragm; extrinsic compression of the colon at the level of the phrenicocolic ligament by the elongated splenic pedicle; and evidence of splenic vein occlusion, as indicated by gastric varices in the absence of esophageal varices. A combination of these findings should permit diagnosis or lead to angiographic or isotopic studies to confirm the presence of a wandering spleen.

Torsion, or volvulus, of the so-called wandering spleen is an unusual condition with distinctive roentgenologic features. The spleen "wanders" because of inadequate ligamentous fixation. It may be located anywhere in the abdomen, but it is usually in the left flank or pelvis. This abnormal soft tissue mass may be discovered on routine physical or roentgenologic examination. Acute symptoms are usually due to torsion, or volvulus, of the abnormally mobile spleen.

**CASE REPORTS**

**Case 1**

A 24-year-old white woman was admitted with a 1-day history of sharp lower-abdominal pain and dizziness. The temperature was 101°F (38.3°C). Marked lower-abdominal tenderness with vague fullness was noted in the suprapubic area. The hematocrit reading was 36% and WBC was 21,400. With supportive treatment and antibiotics for 3 days, the patient became less toxic. A definite mass 6 × 12 cm was then palpated in the suprapubic area.

Abdominal films revealed a soft tissue mass in the pelvis and segmental dilatation of the colon beneath the left hemidiaphragm. An oblique extrinsic defect on the proximal descending colon was noted on the barium enema study (Figure 1). The spleen was not demonstrable in its usual position on either examination.

Laporatomy revealed a smooth brown mass, bound down in the pelvis by adhesions. The mass had a pedicle resembling a twisted umbilical cord. The pedicle originated in the left upper quadrant and passed anterior to the colon causing the extrinsic defect seen on barium enema (Figure 1). No spleen was found in the left upper quadrant. The tail of the pancreas was intraperitoneal, being included in the proximal part of the splenic pedicle. Additional islands of pancreatic tissue were found in the pedicle beyond the tail of the pancreas. Splenectomy was done and pathologic examination revealed thrombosis of splenic vessels and old and recent splenic infarction.

**Case 2**

A 35-year-old woman was hospitalized several weeks following drainage of an appendiceal abscess. During this period, a firm, nontender mass became palpable in the left abdomen. It gradually enlarged. Clinically, this was felt most likely to be the spleen. A GI Series showed displacement of the stomach and small bowel by the mass and gastric varices but no esophageal varices (Figure 2). An aortogram identified the mass as spleen (Figure 3). Selective celiac angiography was attempted but was unsuccessful. An operative splenoportogram revealed occlusion of the proximal splenic vein, collateral vessels bypassing the obstruction, and a beaked appearance of the splenic vein just beyond the twisted portion (Figure 4). Splenectomy was done, and the
DISCUSSION

Torsion of a wandering spleen is relatively rare, 175 cases having been reported as of 1969 (1). There are probably multiple etiologic factors in most cases. Laxity or poor development of the lienogastric and lienorenal ligaments is invariably present. Congenital developmental defects are important in some cases where there is incomplete fusion of the posterior mesogastrium, as evidenced by inclusion of the tail of the pancreas in the intraperitoneal splenic hilum (2, 3). This was true in Case 1. The specimen showed thrombosis of splenic veins and marked congestion.

Fig 1. There is a soft tissue mass in the lower abdomen. The splenic flexure lies beneath the left diaphragm and the spleen cannot be identified in its normal position. Extrinsic pressure at the level of the phrenicocolic ligament is noted (arrow).