Case 877

Multiple Aneurysms of the Splenic Artery

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Section: Cardiovascular
Technique: Ultrasound
Technique: CT
Technique: MR
Case Type: Clinical Cases
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Patient: 50 years, female

Clinical History:

The patient, with epigastric pain, was referred for a sonographic study of the upper abdomen. In view of the findings on ultrasound a selective arteriography of the splenic artery and CT-arteriography were performed.

Imaging Findings:

A 50-year-old woman with epigastric pain was referred for a sonographic study of the upper abdomen. In view of the findings on ultrasound a selective arteriography of the splenic artery and CT-arteriography were performed. Combined imaging Imaging findings were suggestive for multiple aneurysms of the splenic artery. Embolization resulted in complete obliteration of the splenic artery.

Discussion:

Sixty percent of aneurysms of the splanchnic vessels originate from the splenic artery but the true incidence is unknown because most patients are asymptomatic. Aneurysms are most commonly found in the distal third of the artery and 20 percent are multiple. Diagnosis is usually made in the sixth decade. Occurrence is four times more frequent in women, especially following multiple pregnancies. Predisposing conditions include arteriosclerosis, arterial dysplasia, pancreatitis, mycotic emboli, pregnancy, trauma, and portal hypertension. Spontaneous rupture is the most common complication and occurs in 3-5 percent, usually in aneurysms larger than 2 cm in diameter. Forty-six percent of patients initially present with massive intraperitoneal bleeding. Less common complications include splenic artery thrombosis, splenic infarction and gastro-intestinal bleeding from erosion and rupture of the aneurysm into the bowel lumen. Treatment is mandatory in women of childbearing age with lesions greater than 1 cm in diameter, in symptomatic patients with a lesion of any size, and in patients with progressively enlarging lesions. The preservation of the spleen should be a consideration in the treatment of splenic artery aneurysms. Percutaneous embolization seems to be the first choice therapy causing less morbidity than laparotomy.

Differential Diagnosis List: Multiple Aneurysms of the Splenic Artery

Final Diagnosis: Multiple Aneurysms of the Splenic Artery
References:

Description: Ultrasonography of the left hypochondrium shows the presence of an anechoic structure (diameter 25mm) between the left kidney and the tail of the pancreas. The pulsed Doppler ultrasonography demonstrated arterial flow. Origin:
Description: Selective arteriography of the splenic artery visualizes three aneurysms: the first one (long arrow) of 10mm in diameter at the proximal part of the splenic artery, the second one (large arrow) and the largest (25 mm) at the distal part of the artery and the third one (arrowhead) located more distally within the spleen. Origin:
**Description:** On CT scan after intra-arterial injection of diluted contrast medium only the largest aneurysm is clearly demonstrated. **Origin:**
Description: A 3D reconstruction of the spiral CT scan shows the two extrasplenic aneurysms. Origin:
**Figure 4**

**a**

**Description:** Post embolization arteriography demonstrates complete obliteration of the splenic artery.

**Origin:**