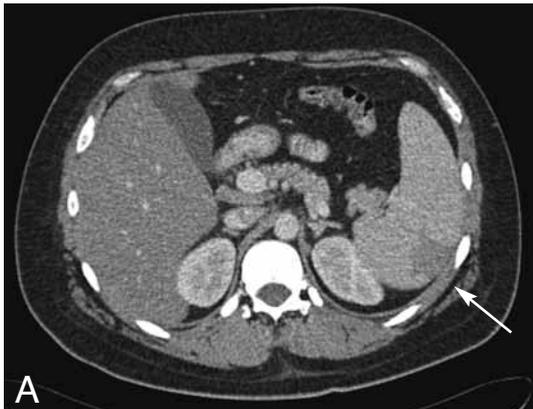


## IMAGES IN CLINICAL RADIOLOGY



### *Reversible splenic ischemia in inflammatory bowel disease*

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A 32-year-old man was admitted to the emergency department complaining of abdominal pain, vomiting and fever. In his medical history we noted Crohn's disease.

The laboratory data showed an increased value of CRP (39 mg/l) and leukocytosis at 14800 WBC/ $\mu$ l. There was also mild elevation of transaminases.

Abdominal MDCT was performed to detect a complication of the inflammatory bowel disease.

The portal venous-phase enhanced CT scan showed wall thickening of the terminal ileum surrounded by some ascitis, compatible with exacerbation of Crohn's disease.

A wedge-shaped hypodense area at the lower posterior part of the spleen was also shown (Fig. A).

Careful study of the splenic and superior mesenteric veins revealed a focal filling defect corresponding to splenic and mesenteric venous thrombosis (Fig. B).

Consequently, the focal splenic lesion corresponded to splenic hypoperfusion secondary to splenic vein thrombosis in a patient suffering from inflammatory bowel disease.

After six weeks anticoagulant treatment, follow-up CT showed that the venous thrombus and the hypodensity of the spleen have disappeared (Fig. C).

The diagnosis of reversible splenic ischemia could be made due to the normalization of enhancement on the follow-up MDCT after medical therapy.

#### *Comment*

Splenic ischemia has many etiologies including hematologic malignant neoplasms, thromboembolism and vasculitis.

It is clinically silent in 30% of cases or is revealed by left upper abdominal pain, chest pain, fever, nausea and vomiting.

Splenic ischemia appears as a wedge-shaped region of low attenuation on portal venous-phase enhanced CT.

Acute splenic vein thrombosis is one of the causes of splenic ischemia. It is mainly secondary to a prothrombotic state resulting from primary or secondary hypercoagulability disorders, cancer, intra-abdominal infections, post-operative condition, cirrhosis and portal hypertension.

In inflammatory bowel disease (IBD) thrombosis has a prevalence of between 1,2-6,1%, most frequently occurring during increased disease activity or during infectious complications.

Patients with the disease have a three times higher risk of venous thrombotic events than the general population. Although the pathogenesis is not completely understood, IBD is recognized as being a hypercoagulable state associated with platelet activation.

Thromboembolic events usually occur as deep venous thrombosis or pulmonary embolism, although thromboses have been detected in other regional circulations, including brain, retina, and liver.

The diagnosis of venous thrombosis is important to prevent complications requiring surgery such as bowel or venous splenic infarctions.

#### *Reference*

1. Miehsler W., et al.: Is inflammatory bowel disease an independent and disease specific risk factor for thromboembolism? *Gut* 2004, 53: 542-548.

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