Case	(197) Mesenteric ischemia due to venous thrombosis in a patient with prothrombotic disorder (factor v leiden)
Authors	N. Sordo Alonso, G. Fernández Suárez, H. Cigarrán Sexto, J. Calvo Blanco, D. García Pérez, V. Santamaría Pérez.
Centre	Hospital Universitario Central De Asturias.

CASE PRESENTATION

A 57 year-old man went to the ER because of an abdominal pain located in the right hypochondrium and flank. He had no medical history of interest except for an appendectomy in his youth. In the analytic that was carried out, only an increase in Creactive protein attracted attention. Given these findings, an abdominal CT was requested to rule out acute cholecystitis.

Portal-phase CT was performed. The findings were the following: thrombosis of the superior mesenteric vein with partial extension to the portal vein and mural thickening of a long segment of ileum with mesenteric fat edema and a discrete amount of free fluid.

DISCUSSION

Diagnosis: mesenteric ischemia due to venous thrombosis in a patient with prothrombotic disorder (factor V Leiden). Acute mesenteric ischemia can be arterial or venous in origin. Mesenteric vein thrombosis is an uncommon form of mesenteric ischemia (5-15%), and it may be classified as primary or secondary.

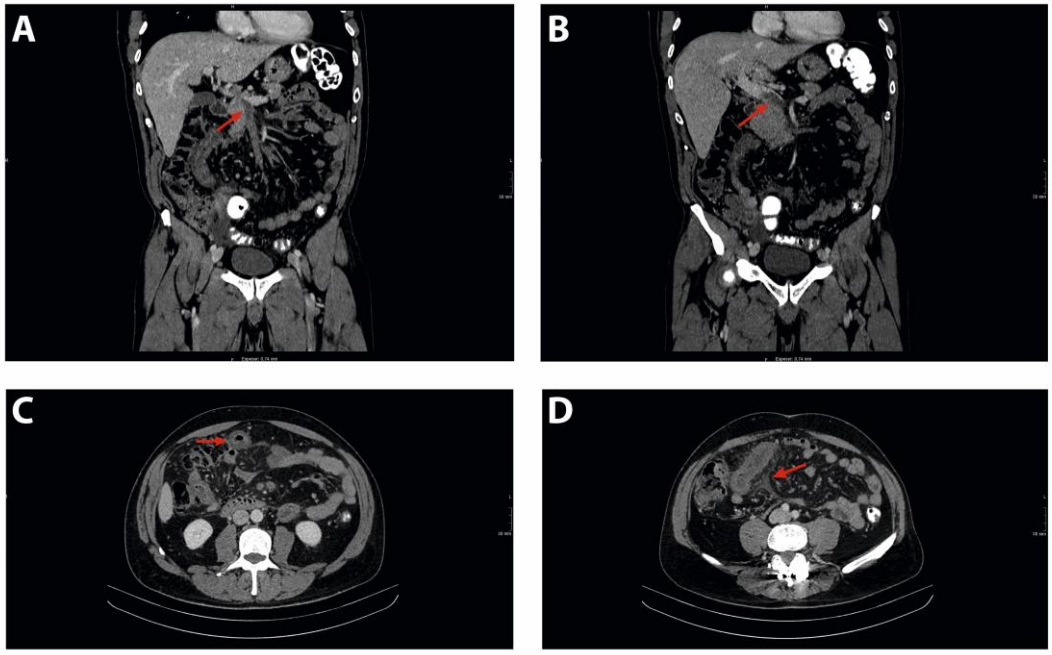
We speak of primary or idiopathic thrombosis when no cause has been found, whereas the secondary one has a predisposing condition, including primary hypercoagulable states or prothrombotic disorders, myeloproliferative neoplasms, cancer, recent surgery, portal hypertension, oral contraceptives and pregnancy. In our particular case, the hypercoagulability state of the patient was unknown, it was discovered later, during tests for thrombophilia.

CT signs of bowel ischemia can be divided into vascular, mural and extramural signs. Among the most important vascular signs are the venous filling defect in the superior mesenteric vein and mesenteric venous congestion. As for the other signs, there are some typical ones in CT of venous mesenteric ischemia which are more infrequent in ischemia of arterial origin: circumferencial bowel wall thickening from intramural edema or hemorrhage (halo or target pattern of enhancement), mesenteric fat edema and ascites.

There are signs that indicate irreversible ischemia or infartion, they are the socalled late signs, and include absent bowel wall enhancement, pneumatosis, portomesenteric venous gas and extrabowel gas. Therefore, the degree of bowel wall thickening, mesenteric fat stranding or ascites do not correlate with severity of ischemic bowel damage.

CONCLUSION

The clinical symptoms of this condition are not very expressive. Therefore it is important to know the pathologies that may predispose to suffer it in order to avoid a diagnosis delay that leads to bowel infarction.



Portal - phase abdominal CT
A-B: Venous filling defect in mesenteric and portal veins, consisten with a thrombosis.
C: Circumferencial wall thickening of the ileum due to intramural edema (halo or target pattern of enhancement).
D: Mesenteric fat edema and some free fluid sorrounding the edematous wall of the ileum. Engorgement of mesenteric veins.

BIBLIOGRAPHY

- Duran R, Denys AL, Letovanec I, Meuli RA, Schmidt S. Multidetector CT features of mesenteric vein thrombosis. Radiographics. 2012; 32(5):1503-22.

- Kanasaki S, Furukawa A, Fumoto K, Hamanaka Y, Ota S, Hirose T, Inoue A, Shirakawa T, Hung Nguyen LD, Tulyeubai S. Acute Mesenteric Ischemia: Multidetector CT Findings and Endovascular Management. Radiographics. 2018; 38(3):945-961.