

Rare case of inferior mesenteric vein thrombophlebitis

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Background:

Abdominal pain is one of the most common complaints encountered in the emergency department. Differential diagnosis of abdominal pain is broad. One study observed that the main causes of abdominal pain are nonspecific abdominal pain (33%), followed by acute appendicitis (23%) and acute biliary disease in (8.8%) of population (1). While Clinicians should keep common diseases in mind, they must also consider out rare but life-threatening causes of abdominal pain. We describe a case of patient presenting with abdominal pain and fever.

Summary:

- 75-year-old man presented with complaints of low-grade fever and mild generalized abdominal pain for 3 days.
- Past medical history significant for diverticulosis.
- Review of systems was positive for loss of appetite and nausea.
- Physical exam was significant for mild tenderness in the left lower quadrant of abdomen and body temperature of 99.2 f.
- Lab work up was unremarkable except elevated CRP and ESR. Blood cultures were negative. Infection work up was negative.
- CT scan of the abdomen and pelvis showed inferior mesenteric vein thrombus and fat stranding along inferior mesenteric vein suggestive of inferior mesenteric thrombophlebitis however imaging was negative for diverticulitis.
- He was initially started on broad spectrum antibiotics and heparin.
- Ultrasound doppler of the liver showed absence of thrombus in the portal vein. MRI venogram abdomen was positive for thrombus in the inferior mesenteric vein and thrombophlebitis.
- WBC scan was negative for any infectious focus.
- Antibiotics were deescalated to Augmentin since blood cultures were negative.
- During his stay in the hospital, his abdominal pain and fever settled down.
- He was discharged on warfarin with follow up with oncology as an outpatient.

Significance : Inferior Mesenteric vein thrombophlebitis is the rare cause of abdominal pain and fever with an incidence of only 2.7 per 100,000. However, rapid recognition of the problem is critical, as it has a mortality rate of 10-20%. Most patients develop it in the context of an infection, with appendicitis and diverticulitis the most common causes of thrombophlebitis in the portal and mesenteric venous systems (2). Our patient was unusual in that no infection was present. Diagnosis is mainly made by the imaging studies including contrast enhanced CT scan of abdomen and pelvis or doppler ultrasound of liver.(3) Treatment of inferior mesenteric thrombophlebitis is antibiotics and anticoagulation. Anticoagulation should be initiated as soon as possible after the diagnosis is made as it has been shown to decrease the mortality.

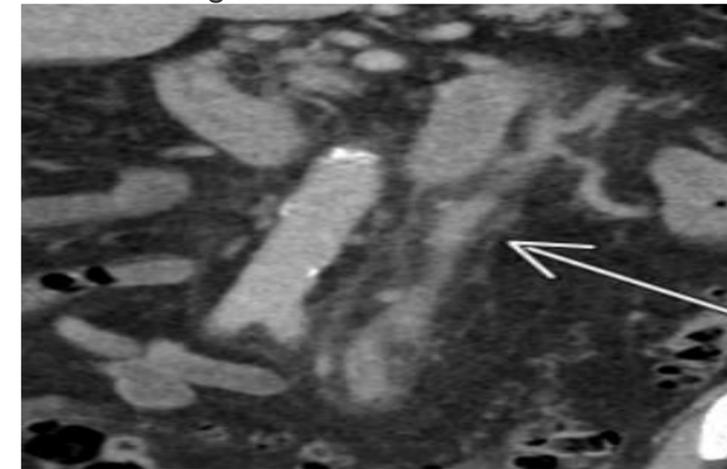


figure 1

Figure 1 arrowhead shows fat stranding along inferior mesenteric vein 2nd image arrowhead shows mesenteric vein thrombus

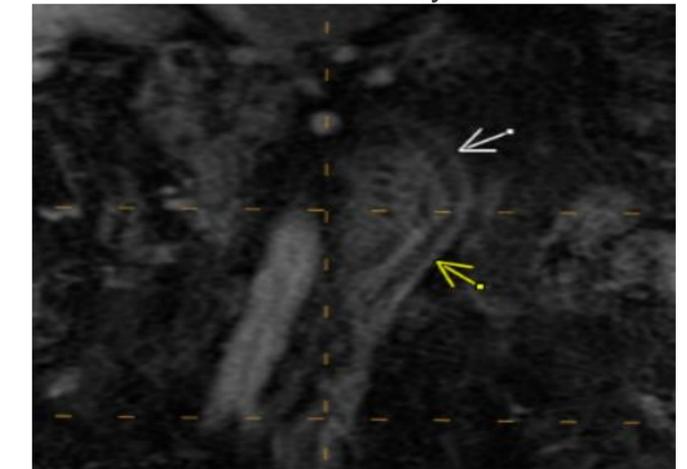


figure 2

References :

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- 2) A. L. Falkowski, G. Cathomas, A. Zerz, H. Rasch, and P. E. Tarr, "Pylephlebitis of a variant mesenteric vein complicating sigmoid diverticulitis," *Journal of Radiology Case Reports*, vol. 8, no. 2, pp. 37–45, 2014.
- 3) *J Clin Exp Hepatol.* 2014 Sep; 4(3): 257–263. Mesenteric Venous Thrombosis
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