

Case	(709) Pylephlebitis with detection of hepatic portal venous gas as a complication of diverticulitis
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CASE PRESENTATION

A 47 year-old man presented to the emergency department with a 5-day history of hypogastrium/left iliac fossa pain followed by fever, diarrhea and vomiting. Physical examination revealed pain/tenderness in left iliac fossa. Laboratory findings included elevated WBC, total bilirubin and transaminase enzyme levels with increased C-reactive protein.

A contrast-enhanced CT of the abdomen demonstrated sigmoid thickened wall with multiple diverticula and increased density of mesenteric fat around the colonic diverticula where gas and a small collection also present, suggesting an inflammatory process (complicated diverticulitis). Another findings were venous filling defects (thrombi) with gaseous foci in the inferior mesenteric vein, splenic vein and portal vein up to hepatic periphery branches portal veins. In addition, perivascular inflammation with fat stranding around the inferior mesenteric vein.

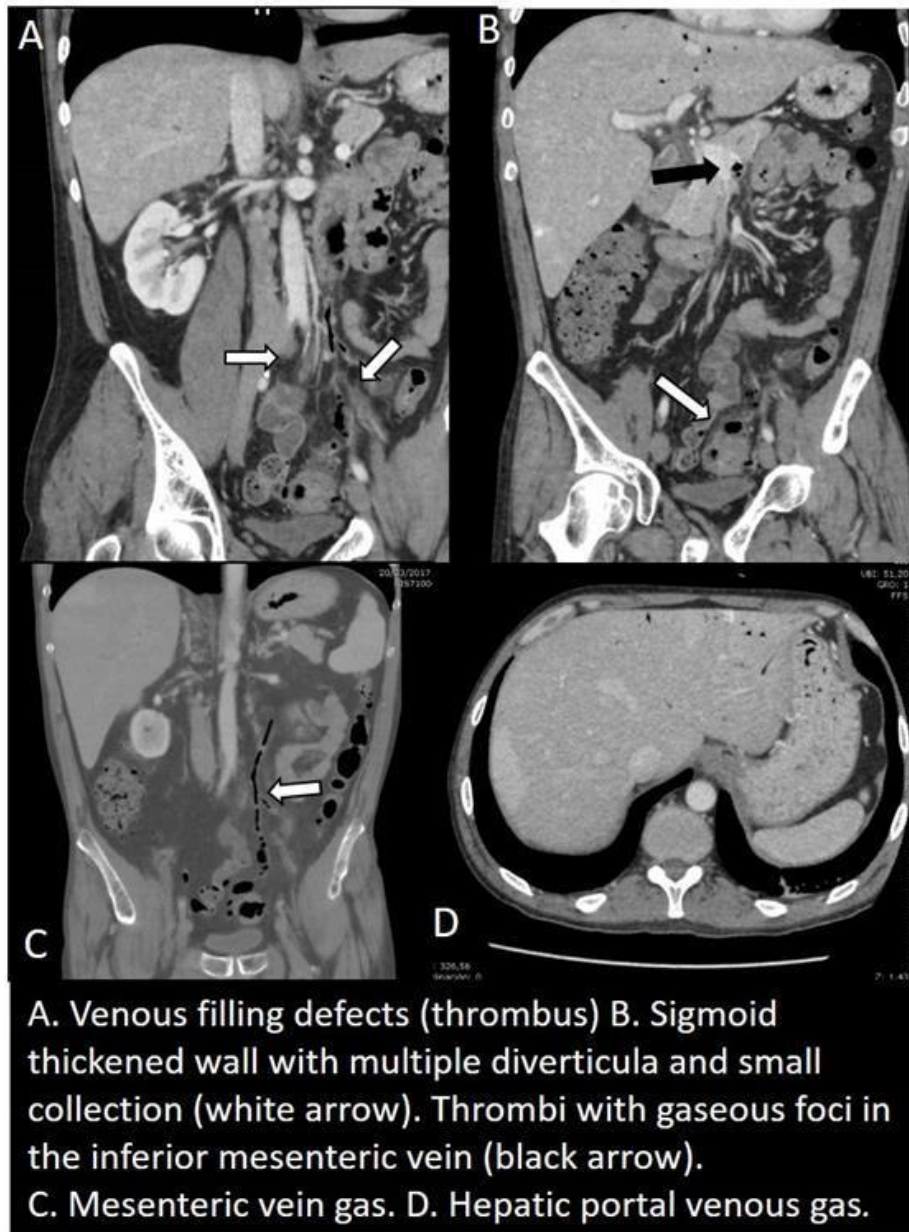
DISCUSSION

Pylephlebitis of the portal vein and its branches, is an infrequent complication of intraabdominal inflammatory processes, such as diverticulitis (in 30% of cases), appendicitis, necrotizing pancreatitis and inflammatory bowel diseases, which may lead to thrombosis of the portal vein or to liver abscesses. It occurs in 0.16% of patients with intra-abdominal infections. It typically affects individuals between 40 and 65 years of age, and 60-70% of the affected individuals are male. *Bacteroides fráigiles* and *E. coli* are the most common pathogens. Air in the portal venous system usually predicts a fatal outcome.

The clinical presentation of pylephlebitis is nonspecific, common symptoms being fever, abdominal pain and jaundice. The diagnosis includes intraluminal gas, dilatation of the vein, perivascular inflammation, lymphadenopathy and a filling defect due to thrombosis.

CONCLUSION

Pylephlebitis is a rare complication of abdominal infections, especially diverticulitis. It can lead to severe complications which increase the mortality rate. As radiologists its very important to recognize this entity and its radiological features to manage and treat the condition appropriately. Therefore, assessment of the intra-abdominal veins should routinely be done when interpreting abdominal CT images.



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