Pylephlebitis is a very rare and dangerous complication of inflammatory abdominal processes, mainly appendicitis (1) and diverticulitis (2). Many abdominal and extra-abdominal conditions can lead to portal or mesenteric vein thrombosis (3); it has been reported as a complication of hypercoagulation disorders, trauma, cirrhosis, or after splenectomy. It is called pylephlebitis or ascending septic thrombophlebitis when this thrombophlebitis is septic, quite often associated with a primary gastrointestinal inflammatory source. This unusual condition had a reported mortality of more than 50% before the era of the antibiotics. We report here a case of peri-diverticular inflammation leading to an extensive phlebitis of the adjacent sigmoid vein, extending to the inferior mesenteric vein up to the proximal portal vein, with distal embolus in the left portal vein.

Case report

A 76-year-old lady was admitted for altered clinical status, left flank and left lower abdominal pain, fever (39°C). Blood tests showed highly elevated CRP levels (320 mg/l). In her past history one episode of peri-diverticulitis two years earlier, treated without surgery. The abdominal CT performed at admission in the emergency department revealed a large air collection just close to the sigmoid colon, with infiltration of the adjacent fat. The sigmoid veins were thrombosed, as was the inferior mesenteric vein up to the lower portal vein. And the left intrahepatic portal vein was also thrombosed.

Intravenous antibiotic therapy (amoxicillin clavulanate) and subcutaneous injections of low molecular weigh heparin (LMWH) were started, leading to early biological response (CRP levels at day 4 lowered to 40 mg/l) and slower clinical response. No hepatic abscess developed and the patient left the hospital after 20 days, still on oral antibiotic and anticoagulation therapy.

Discussion

Pylephlebitis was a dread-full and often lethal complication of some cases of appendicitis before the utilization of the antibiotics. Diverticular disease has replaced appendicitis as the most common cause of pylephlebitis, with other possible sources including appendectomy, uterine fibroids, and various abdominal neoplasms. When pylephlebitis is septic, a primary gastrointestinal inflammatory source is almost always found. Anticoagulation therapy is curative. We report here the first case of pylephlebitis complicating peridiverticulitis without a hepatic abscess.

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often with drainage of these abscesses. Especially in case of liver abscess, antibiotic therapy is recommended, or more hepatic abscess. Long term side, but untreated can lead to one or more hepatic abscess. Late hepatic abnormalities consist, as in our patient, of unopacified branches of the portal vein (Fig. 1D) and distally: segmentally thrombosed portal branch (Fig. 2A) or liver abscess. Sequential reading of the axial and coronal slices allows precise analysis of the vessels involved by the thrombus, but, in small vessels such as the inferior mesenteric vein, curved reconstructions can help in recognizing the vessels and their continuity (Fig. 2A, B).

**Conclusion**

Unenhanced MDCT can detect acute diverticulitis with a very high accuracy, but complications such as venous thrombosis and portal vein emboli could be difficult to diagnose without intravenous injection. In this case, early diagnosis and early treatment may have helped avoiding the development of intrahepatic abscesses. Multiplanar and curved reconstructions can help recognizing the small thrombosed veins.

**Bibliography**