IMAGE OF THE ISSUE

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Thrombophlebitis of the Umbilical Vein: A Rare Complication of Acute Pancreatitis

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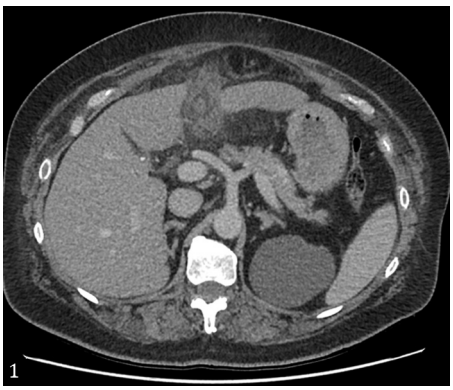

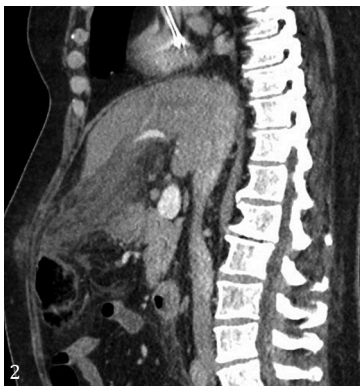

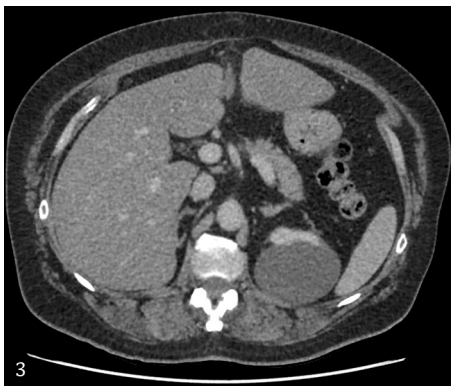

A 65-year-old woman presented with nausea, vomiting, and right upper quadrant pain radiating to her back. Past medical history included biliary pancreatitis with cholecystectomy three years prior, steatohepatis, diabetes mellitus type II, and congestive cardiomyopathy on vitamin K antagonist therapy (INR 2.4). Inflammatory markers and liver enzymes were mildly elevated with markedly high lipase (2,100 IU/ml). Abdominal ultrasound showed no choledocholithiasis or ductal dilatation, and she was treated for suspected recurrent biliary pancreatitis with intravenous fluids and analgesics.

On day five abdominal pain worsened, accompanied by a fever of 38.5^{0}C and rise in C-reactive protein (15mg/L to 410 mg/L). A computed tomography (CT) scan in the portal venous phase demonstrated an obliterated umbilical vein and surrounding fat infiltration, suggestive of proximal umbilical vein thrombophlebitis (Figs. 1 and 2). In a retrospect CT, the umbilical vein of our patient showed enhancement in portal venous phase five years earlier (Supplementary file).

To prevent thrombus expansion, anticoagulant therapy was switched to low molecular weight heparin. No antibiotics were administered in absence of infected necrosis; blood cultures remained negative. Symptoms improved and the patient was discharged one week later. Four months later, the umbilical vein was non-patent with near-complete resolution of surrounding fat infiltration (Fig. 3). Initial vitamine-K-antagonist therapy was resumed. One-year follow-up was unmarkable with no recurrent thrombosis or pancreatitis.

Acute pancreatitis induces local and systemic inflammation causing a thrombogenic state [1]. Portal vein thrombophlebitis is frequently caused by necrotizing pancreatitis [2], but thrombotic complications are less prevalent in cases without necrosis, and rarely include extension in the umbilical vein. In literature, two causes for thrombophlebitis and recanalization in the umbilical vein have been proposed. One case sugested portal vein thrombosis induced portal hypertension, causing umbilical vein recanalization and thrombus expansion [3]. Another attributed recanalization and thrombus development to local inflammation, as portal vein thrombosis was absent in this case [4].

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Conflicts of interest: None to declare.

Supplementary material: To access the supplementary material visit the online version of the *J Gastrointestin Liver Dis* at http://dx.doi.org 10.15403/jgld-5988

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