Title:
Falciform ligament thrombosis after umbilical vein recanalization in the setting of acute pancreatitis, a rare entity

Authors:
Jaime Escobar Ortiz, Jorge Pérez Pérez, Luisa Adán Merino, Candela Muñoz Roldán, Elena Barcina García, Ángel Ponferrada Díaz

DOI: 10.17235/reed.2023.9762/2023
Link: PubMed (Epub ahead of print)

Please cite this article as:

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.
Dear Editor,

We present the case of a 79-year-old male with no personal history of interest, who was admitted to our center due to mild acute pancreatitis of biliary origin. Abdominal physical examination revealed a pasted, erythematosus, painful area with an increase in local temperature, acquiring a longitudinal path from the epigastric to umbilical region. Analytically, elevation of amylase and lipase in the range of acute pancreatitis were highlighted, as well as a slight increase in acute phase reactants without other alterations.

An abdomino-pelvic computed tomography (CT) study was performed, revealing an extensive inflammatory infiltrate from the left portal branch to the entire path of the falciform ligament, compatible with recanalization and thrombosis of the umbilical vein (Fig. 1A-D). Autoimmune and infectious causes were ruled out and the thrombophilia study was negative. After six months of anticoagulation with low molecular weight heparin, the evolution was favorable with almost complete...
resolution of thrombosis (Fig. 1E and F).

Discussion
Thrombosis of the falciform ligament (remnant of the umbilical vein) as a complication of acute pancreatitis is very unusual, with isolated described cases (1,2). Umbilical vein recanalization has been described primarily in patients with liver disease and portal hypertension.

On the other hand, the systemic proinflammatory state that occurs in acute pancreatitis can favor thrombotic events, especially in the splenoportal territory. The main hypothesis proposed is contiguous thrombophlebitis from these areas to the falciform ligament, producing its recanalization and subsequent thrombosis (3,4). In most of the cases described, as in this case, thrombosis is associated with the left portal branch. Its diagnosis and recognition by imaging tests (5) can prevent misdiagnoses as well as unnecessary invasive procedures. The prognosis is generally good, responding favorably to anticoagulant treatment.

References
Fig. 1. Images of abdomino-pelvic computed tomography (CT) with contrast. A-D. Cross-sections in which extensive inflammatory infiltrate of fat (arrows) is observed around the portal bifurcation and the left portal ramus, slightly stenosing the left intrahepatic radicals and extending along the entire route of the falciform ligament to the umbilical region. E and F. Cross-sections showing significant improvement of the entire inflammatory process (arrows) after treatment.