

Pancreatic walled off necrosis extending along portal vein tract: A rare complication of severe necrotizing pancreatitis.

A 40-year-old man was admitted with a complaint of severe acute on chronic pancreatitis. Initial evaluation revealed multiple pancreatic and extra-pancreatic walled-off necroses (WONs), atrophic pancreatic body and tail, and a thrombosed splenoportal axis with periportal, peripancreatic and perigastric collaterals. There was a retrohepatic acute necrotic collection that was drained by an endoscopic cysto-gastrostomy.

A follow-up Contrast-Enhanced Computed Tomography (CECT) scan of the abdomen after around one month revealed a 6x6x4 cm WON in the pancreatic head (Fig. 1B) which is extending into porta coursing along with the right and left portal venous tract. Direct communication between the WON and the dilated portal vein was seen with similar attenuation of the WON fluid and portal vein (Fig. 1A). The collection extended into the intrahepatic branches of the portal vein in both lobes. Color Doppler scan shows non-visualization of the main portal vein with portal cavernoma formation (Fig. 2).

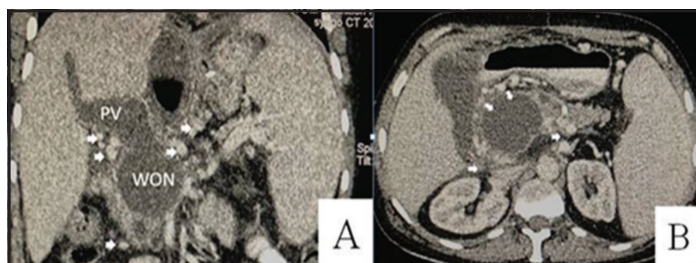


Figure 1: CECT coronal section shows (a) WON communicating with portal vein. Solid arrow represents collaterals and (b) axial section shows a WON in the head of pancreas.

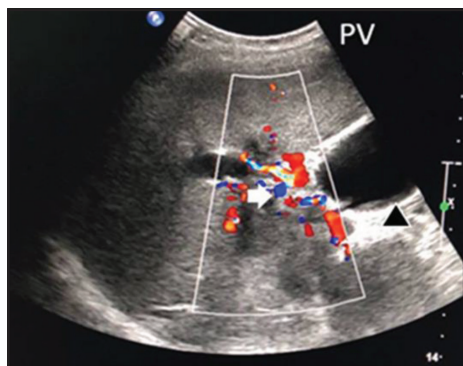


Figure 2: Color Doppler shows non-visualization of portal vein and multiple portal vein cavernoma.

Extension of the pancreatic WON or Pseudocyst into the portal vein is a rare complication. The diagnosis of most of these cases was made by using invasive diagnostic procedures like endoscopic retrograde cholangiopancreatography (ERCP) [1,2]. Only a few of the reported cases have been diagnosed by using non-invasive radiological procedures like ultrasound, CT and magnetic resonance imaging (MRI) [3,4]. The exact pathological series of events that leads to an extension of the pseudocyst and WON into the portal vein is controversial. It has been postulated that initially, thrombosis of the portal vein occurs. The contents of the pseudocyst and WON contain proteolytic enzymes which causes erosion of the wall of the portal vein and subsequently leads to the passage of these contents into the portal vein [4].

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