

Ansa Pancreatic, The Rarest Pancreatic Duct Anatomical Variation: Accidentally Discovered in An Infant

Yahya El Harras*, Safaa Choayb, Rachida Chehrastane, Nazik Allali, Latifa Chat, Siham El Haddad
Department of Pediatric and Gynecology Radiology, Children's Hospital, University Mohammed V, Rabat, Morocco

***Corresponding author:** Yahya El Harras, Department of Pediatric and Gynecology Radiology, Children's Hospital, University Mohammed V, Rabat, Morocco

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The majority of pancreatic duct congenital defects and anatomic variants were reported in the literature as asymptomatic and accidentally discovered in imaging modalities. Pancreas divisum is the most frequent one and on the other hand ansa pancreatica is the rarest (**Figure 1**).

Derived from the Latin "ansa", meaning "handle" as its configuration resembles a handle, ansa pancreatica is a rare type of pancreatic duct anatomical variation, defined by a communication between the Wirsung (main pancreatic duct) and the Santorini (accessory duct) [1].

It was first reported in 1961 by Dawson and Langman as the obliteration of the accessory duct at its junction with the ventral duct, being replaced with an additional curved communicating duct between the ventral and dorsal ducts at the pancreatic head.

This additional duct will arise from the ventral one and then run into the caudal side, turns to the ventral side with a reversed S-shaped curve so it can finally terminate in and around the minor papilla.

In the last decade, it was reported that ansa pancreatica is a predisposing factor for pancreatitis, especially in its acute form. In 2016, Hayashi et al. published the first study investigating the clinical significance of ansa pancreatica using a case-control study design which concluded that the presence of this anatomical variation is indeed a predisposing factor for the onset of recurrent acute pancreatitis [2].

Thus, the aim of our image article is to report this variation even if it is being accidentally discovered. Our patient presented for a Magnetic Resonance Cholangiopancreatography (MRCP) for jaundice which later turned to be secondary to

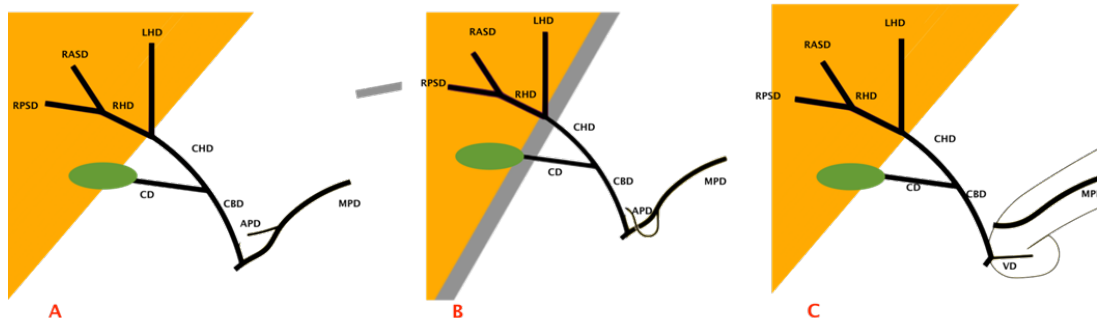


Figure 1: Schematic anatomical variants of the pancreatic ducts. The most frequent configuration described as normal. (B) Ansa pancreatica configuration. (C) Complete pancreas divisum.

drepanocytosis. We noted the presence of Ansa Pancreatica and reported it to the medical team.

To sum up, since the ansa pancreatica is actually considered a predisposing factor to idiopathic acute pancreatitis, radiologists should know about this rare anatomic variation and highlight its presence whether it is discovered accidentally or as part

of the screening routine for acute pancreatitis.

APD: accessory pancreatic duct, CBD: common bile duct, CD: cystic duct, CHD: common hepatic duct, LHD: left hepatic duct, MPD: main pancreatic duct, RASD: right anterior sectorial duct, RHD: right hepatic duct, RPSD: right posterior sectorial duct and VD: ventral duct

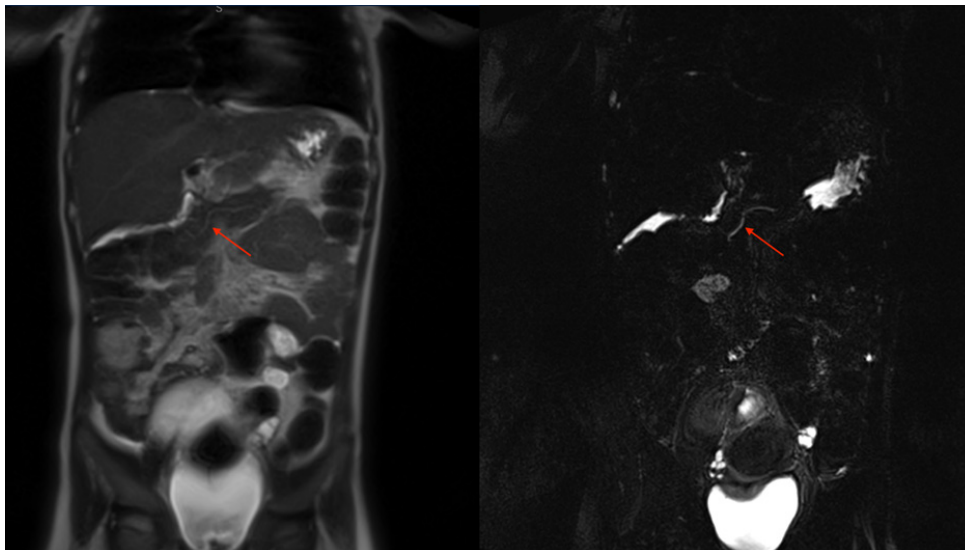


Figure 2: 11 years old girl presented with jaundice: accidental discovery of ansa pancreatica. Coronal T2 WI and 3D CP sequences showing the handle (red arrow) formed by the accessory duct defining the ansa pancreatica.

References

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2. Hayashi TY, Gonoi W, Yoshikawa T, Hayashi N, Ohtomo K. Ansa pancreatica as a predisposing factor for recurrent acute pancreatitis. *WJG*, 2016; 22(40): 8940.