

Intra pancreatic replaced common hepatic artery: a rare anomaly and its clinical implications

Short communication

A replaced common hepatic artery (CHA) traversing the pancreatic parenchyma is rare.¹⁻³ However, recognition of this has important practical implications in both multi-organ retrieval and pancreatic surgery. In elective pancreatic surgery, it is essential for the surgeon to meticulously trace the arterial anatomy of the celiac axis and the superior mesenteric artery (SMA), on preoperative imaging, as such anomalies may not be reported by the radiologist. If unrecognized, it may lead to torrential intra-operative haemorrhage or more dangerously, compromise hepatic arterial inflow.

A 21 year old gentleman presented with significant recurrent pain in epigastrium needing opiates and a history of steatorrhea of many months. On evaluation with a contrast enhanced CT, the body and tail of the pancreas were mildly atrophic with an inflammatory head mass. Multiple parenchymal calcifications were seen throughout the pancreas, with a dilated main pancreatic duct with multiple intra-ductal calculi consistent with chronic calcific pancreatitis. He was planned for a Frey's procedure. On pre-operative review of the arterial anatomy, a replaced CHA was found to be originating from the SMA and traversing through posterior pancreatic parenchyma (Figure 1) (Figure 2). This changed the surgical options that the patient could be offered.

Intra-operatively, there were stones deep in the head and the uncinate which could be sounded with a probe, but could not be extracted without risking injury to the aberrant CHA. A head coring operation such as Frey's procedure which would have been ideal was not done in view of the risk of injury to the CHA in its trans-pancreatic course. He underwent a Lateral pancreaticojejunostomy.



Figure 1 Common Hepatic Artery traversing through pancreatic parenchyma (arrow).

Special Issue - 2018

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Received: February 13, 2017 | **Published:** September 19, 2018



Figure 2 Intra-pancreatic Common Hepatic artery (arrow) with parenchymal calcifications (star).

Acknowledgements

None.

Conflict of interest

Author declares that there is no conflict of interest.

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