

A rare cause of acute pancreatitis; impacted stone at the minor papilla with pancreatic divisum

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Introduction: Pancreas divisum is the most common congenital pancreas anomaly, occurring in approximately 10 percent of the general population. As more than 95 percent of patients with pancreas divisum are asymptomatic, there is considerable controversy as to whether pancreas divisum is associated with pancreatitis. We report here a rare case of acute pancreatitis caused by an impacted pancreatic stone.

Case report: A 34-year-old man presented with epigastric pain that started 5 days before admission. The patient experienced acute pancreatitis at another hospital 2 months ago. The patient had been drinking 3 bottles of soju 2-3 times a week for 10 years ago but has stopped drinking alcohol in the last 2 months due to acute pancreatitis. His physical examination noted mild direct tenderness on epigastric area. Initial laboratory tests showed amylase and lipase elevation to 979/3110U/L, but other laboratory tests including liver function test and lipid profile were not remarkable. Abdominal CT showed mild swelling of the pancreas and fat stranding around the pancreas, suggesting of acute pancreatitis. On CT image, a tiny radiopaque impacted stone was suspected around the ampulla of Vater, with mild pancreatic duct dilatation. ERCP was performed on the second day of admission. On ERCP, a 3mm-sized whitish pancreatic duct stone was impacted on the minor papilla. After needle-knife precutting the protruded minor papilla, pancreatic duct stone was extracted. After the procedure, pancreatography demonstrated contrast fillings of the dorsal duct draining the pancreas, and pancreatography via major papilla showed short and thin ventral duct without communication between them, suggesting pancreatic divisum. After the procedure, patient's symptom improved, and amylase and lipase level was normalized. MRCP images in 6 months after procedure visualized the dorsal pancreatic duct crossing anterior to the common bile duct and draining superiorly into the minor papilla, which suggested typical radiologic finding of pancreatic divisum.

Conclusion: We report a rare case of acute pancreatitis caused by an impacted pancreatic stone on the minor papilla with pancreatic divisum.

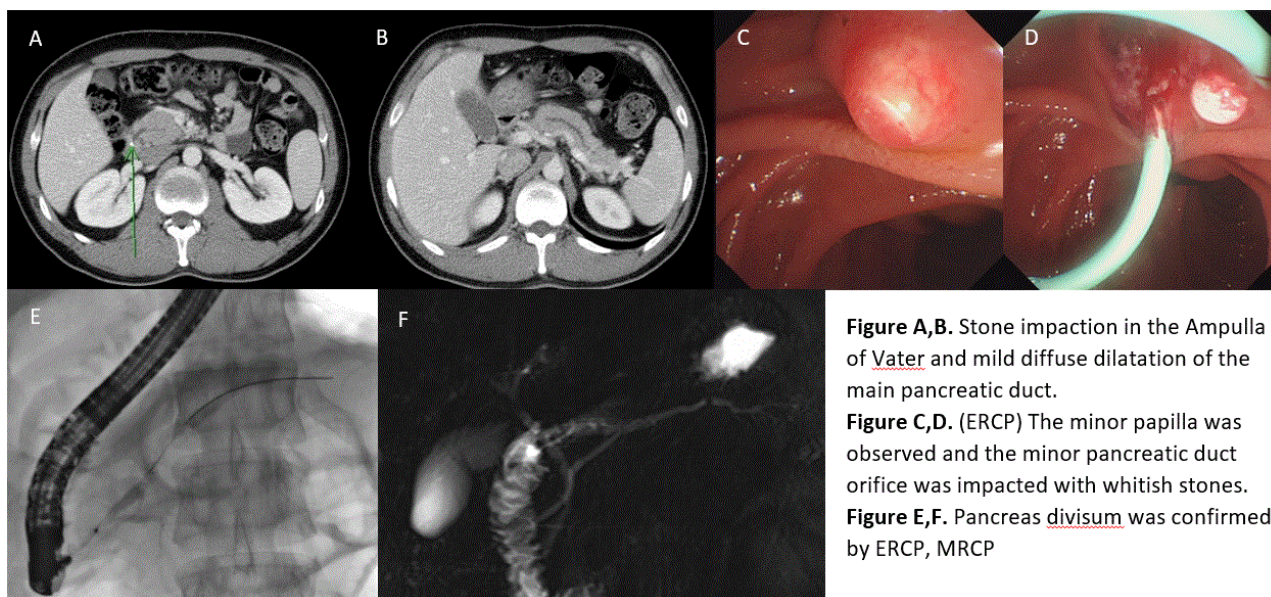


Figure A,B. Stone impaction in the Ampulla of Vater and mild diffuse dilatation of the main pancreatic duct.

Figure C,D. (ERCP) The minor papilla was observed and the minor pancreatic duct orifice was impacted with whitish stones.

Figure E,F. Pancreas divisum was confirmed by ERCP, MRCP