

Pancreas Divisum Treated With Pylorus-preserving Pancreatoduodenectomy : A Case Report

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Background : Pancreas divisum (PD) is a rare anatomical variant of the pancreas and is characterized as a nonfusion of embryologic ventral and dorsal pancreatic roots. Most patients are doing without symptoms and incidentally found by imaging studies. Only 5% of PD develop symptoms of recurrent pancreatitis. PD is unfamiliar to clinicians and its managements are unknown.

Methods : A 29 year-old male patient admitted due to severe epigastric pain lasting for 3 months. The patient had indigestion, postprandial discomfort and frequent nausea and vomiting since childhood. He admitted with epigastric pain 5 years ago, and managed under the impression of acute pancreatitis. The height and weight was 174cm and 70kg respectively. BMI was calculated as 23.1 and compatible with mild over-weight. The laboratory finding was glucose 97 mg/dL, protein/albumin 6.9/4.5 g/dL, cholesterol 174 mg/dL, amylase/lipase 517 IU/L/326 U/L, and CA 19-9 156 u/mL. The imaging studies were performed. ERCP was done. The major duct was faint and endoscopic stenting into minor papilla was tried, but failed. The surgical approach was suggested to patient.

Results : The pancreatic head was hard and severely adhered to the duodenum and the transverse colon. Pylorus-preserving PD was performed. After operation minor leakage from T-tube developed and managed well with conservative management. At present, 62 months after operation, the patient is doing well without digestive complaints and gained 3 kg of weight.

Conclusions : Endoscopic intervention is the choice of management for symptomatic PD. Endoscopic papillotomy or stenting is recommended. However, the success rate of endoscopic intervention is not high, because most PD have obliterated major papilla. When endoscopic approach failed, surgical treatment is suggested. If pancreas is soft without inflammation, surgical sphincteroplasty is recommended. If pancreas is altered with recurrent pancreatitis, resection is advised. Duodenum preserving pancreas head resection (DPPHR), pancreatoduodenectomy or segmental resection of pancreas are suggested and selected by the location of pathologic pancreas. Our patient is not classical PD and functional PD. Considering the age of the patient, PPPD is rather destructive. The result of long-term follow-up should be evaluated.

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