

A Case of Unexplained Asymptomatic Pancreatic Hyperenzymemia Solved by Endoscopic Ultrasound: Adult Annular Pancreas

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Context Annular pancreas is an uncommon congenital anomaly in which the pancreatic tissue forms a complete (25%) or partial (75%) ring around the descending duodenum. It usually presents in infants with abdominal pain, nausea and vomiting due to obstruction to gastric emptying. It rarely may manifest later in life. **Case report** A 40-year-old man was referred for further evaluation of a 1-year history of fluctuating pancreatic hyperenzymemia with mild elevations both of amylase and lipase, typically less than twice the normal range. The patient was completely asymptomatic and in good physical condition. He had a past medical history of right kidney dysplasia. He was not on any medication and had no alcohol and smoke habit. Other routine serological tests were within the normal range. Abdominal ultrasound, magnetic resonance imaging and computed tomography (CT) performed prior to admission demonstrated no pancreatic abnormalities. We performed an endoscopic ultrasonography (EUS) with radial echoendoscope (GF-UE160, Olympus, Hamburg, Germany) that showed a band of pancreatic tissue completely surrounding the duodenum. Pancreatic ducts were normal, both in

tissue band than throughout the pancreas. Any feature of chronic pancreatitis was seen. Endoscopy showed narrowing of the descending duodenum with a normal mucosal pattern. Because of total absence of symptoms no treatment has been recommended. At 12-month follow up the patient was still asymptomatic with no substantial differences in laboratory tests. **Conclusion** CT and MR cholangiopancreatography (MRCP) are generally useful for diagnosis of annular pancreas. Endoscopic cholangiopancreatography (ERCP) is able to demonstrate pancreatic duct encircling the duodenum. However, ERCP is technically difficult in cases with duodenal obstruction and it is known that the procedure may potentially induce or aggravate acute pancreatitis. Because of its ability in evaluating not only the pancreatic duct but also the parenchyma, EUS seems to be the best method for the diagnosis of pancreatic disease. EUS appears to have an important role in the diagnosis of annular pancreas even when previously unsuspected. Annular pancreas as a possible finding in case of asymptomatic pancreatic hyperenzymemia should be kept in mind.