A CASE OF GROOVE PANCREATITIS

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Abstract:
Groove pancreatitis, a rare form of chronic pancreatitis which affects the groove between the superior aspect of the pancreatic head, the duodenum, and the common bile duct. It is a rare form of pancreatitis, and only a few descriptions of it exist in the radiology and pathology literature. Here we report a case of groove pancreatitis in a middle-aged male.

Keyword: Groove pancreatitis, pancreatitis

Introduction
Groove pancreatitis (GP) is a rare form of chronic pancreatitis which affects the “groove” between the superior aspect of the pancreatic head, the duodenum, and the common bile duct which was first described by Becker et al in 1973 (1). Stolle et al described in 1982 the first series of patients and described the characteristics of this entity (2). It is also known as paraduodenal pancreatitis, cystic dystrophy of heterotopic pancreas and pancreatic hamartoma of the duodenum. All these denominations refer to its morphological characteristics.

Case Report
A 33-year-old male presented with complaints of recurrent upper abdominal pain of two years duration. The pain radiating to back usually lasted for 3 – 4 days. He required to be hospitalized 5 times. He had history of chronic alcohol intake ~ 600 ml of country liquor daily for 10 years. He used to smoke one bundle of bidis daily for 10 years. There was no history of jaundice, fever, vomiting, steatorrhoea, loss of weight or loss of appetite. He was neither a diabetic nor a hypertensive. His general examination, vitals, and systemic examination did not reveal any significant findings.

He was evaluated with the basic investigations (complete blood count, liver function tests, creatinine, blood sugar, lipids, and calcium) which were normal CA 19/9 was <2.5 (normal range 0-33).

Computed Tomography (CT) abdomen (Figure 1) showed hypo-dense soft tissue in the pancreaticoduodenal groove abutting the head of pancreas with adjacent mild wall thickening of adjacent part of duodenum.
Figure 1: Computed Tomography(CT) abdomen

Endoscopic ultrasound (EUS) (Figure 2) showed the head of the pancreas and the wall of the duodenum were edematous and bulky. The parenchyma of the head had an uneven heterogenous echo pattern. There were no cysts or masses.

Figure 2: Endoscopic ultrasonography (EUS)

As Ca 19-9 was normal and EUS did not show any mass lesion within the pancreas, diagnosis of groove pancreatitis was made. Our patient responded to conservative management and was asked to follow-up in psychiatry for deaddiction and counselling.

Discussion

Groove pancreatitis (GP) is a rare form of segmental chronic pancreatitis affecting the anatomic space between the head of the pancreas, the duodenum and the common bile duct. Becker classified groove pancreatitis into a pure form which only affects the groove area and a segmental form in which all the head of the pancreas is affected (1). The exact underlying cause of groove pancreatitis is not clear, although a number of different theories exist: functional obstruction of the minor papilla or duct of Santorini, increasingly viscous pancreatic secretions as a result of alcohol use or smoking, Brunner gland hyperplasia resulting in stasis of pancreatic secretions in the dorsal pancreas, heterotopic pancreas in the duodenum, and peptic ulcer disease have all been suggested as potential contributing factors (3, 4). However, chronic alcohol has the strongest association (5).

Patients with groove pancreatitis are inevitably middle-aged men with a history of significant alcohol abuse, which was also the case with our patient. The clinical presentation of groove pancreatitis can vary. Although some patients can have a presentation similar to that of acute pancreatitis, most have a more chronic disease course. The main symptoms include recurrent abdominal pain, vomiting and weight loss. Jaundice is extremely rare but may be present if late stenosis of the common bile duct occurs. (6). The laboratory tests may show a slight elevation of pancreatic enzymes whereas the tumour markers, the bilirubin levels and alkaline phosphatase are rarely elevated in GP (5).
On CT scan GP usually presents a hypodense mass with a patchy enhancement in the portal venous phase, together with duodenal cystic dystrophy (7). Endoscopic ultrasound (EUS) may show cyst dystrophy of the duodenal wall with smooth tubular stenosis of the intrapancreatic common bile duct as well as minor irregularities of the main pancreatic duct might be revealed. The main challenging aspect of GP is its differential diagnosis from groove pancreatic adenocarcinoma (GPA). GP usually responds to conservative measures. Surgical resection should be reserved for patients with severe symptoms or if malignancy is strongly suspected.

References:


