

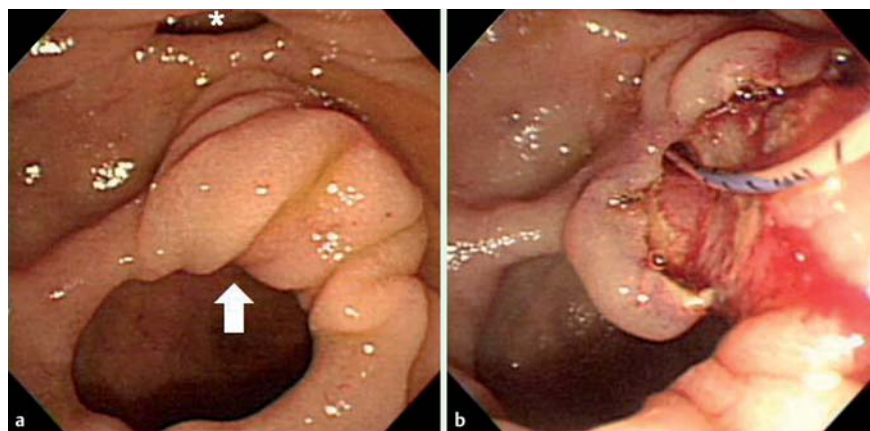
## Acute pancreatitis due to an impacted juxtapaillary duodenal diverticulum



**Fig. 1** Abdominal computed tomography (CT) scan showing a round, 2.7-cm, low density lesion with a central area of air density in the second part of the duodenum and swelling of the adjacent pancreas. The common bile duct (arrow) and pancreatic duct (arrowhead) are seen above the lesion.



**Fig. 2** Esophagogastroduodenoscopy showing a yellowish phytobezoar impacted in a juxtapaillary duodenal diverticulum (JPDD).



**Fig. 3** Views during endoscopic retrograde cholangiopancreatography (ERCP) showing: **a** a large juxtapaillary duodenal diverticulum (JPDD) located caudally to the papilla and another small diverticulum above (asterisk). The papillary orifice was located deep inside on the ceiling of the diverticulum (arrow) and was not visible without retraction of the mucosa; **b** the opening of the papillary orifice exposed outside the diverticulum after an endoscopic sphincterotomy had been performed.

A 58-year-old woman presented with severe abdominal pain. Laboratory findings showed markedly raised amylase and lipase concentrations at 1169 IU/L and 5040 IU/L respectively. She denied any alcohol consumption. Triglyceride and calcium levels were within the normal range. An abdominal computed tomography (CT) scan showed a round, 2.7-cm, low density, mass-like lesion with a central area of air density in the second part of the duodenum (● Fig. 1). Esophagogastroduodenoscopy (EGD) revealed a bezoar impacted in a juxtapaillary duodenal diverticulum (JPDD; ● Fig. 2). The hard phytobezoar was broken up and removed using grasping forceps. After the

bezoar had been removed, her pancreatitis improved.

A subsequent endoscopic retrograde cholangiopancreatography (ERCP) showed that the JPDD was located caudally to the papilla with the papillary orifice hardly visible, being located deep inside on the ceiling of the diverticulum. No biliary sludge or stones were noted. A sphincterotomy was performed to prevent recurrence of the pancreatitis (● Fig. 3).

JPDDs are usually located on the cephalic side of the major papilla and may be associated with biliary stasis or relapsing pancreatitis [1–4]. Food or bezoar impaction in a JPDD is known to cause biliary obstruction; however, pancreatitis due to

bezoar impaction in a JPDD has never been reported, although there are reports of pancreatitis due to impaction of a large bezoar in the duodenal lumen itself [5]. The reason for this seems to be the anatomical proximity of the common type of JPDD to the bile duct rather than the pancreatic duct (● Fig. 4).

In this report, bezoar impaction in a rare caudally located type of JPDD caused acute pancreatitis. This is a rare cause of acute pancreatitis and an unusual clinical manifestation of a JPDD caused by its location.

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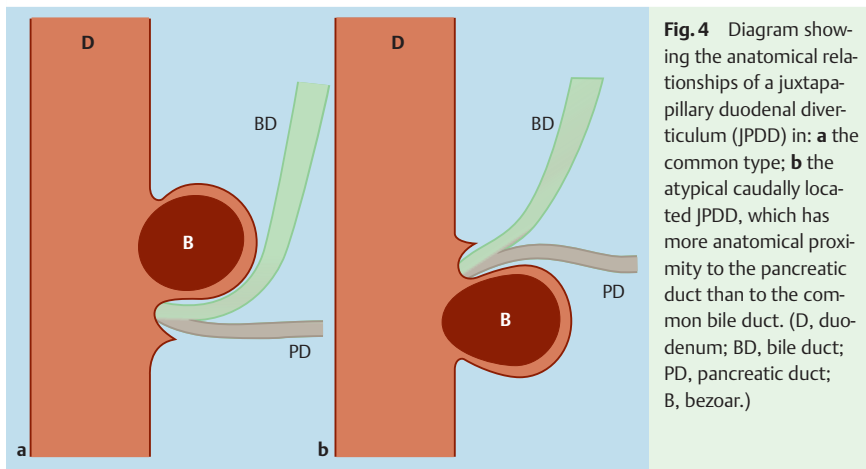
**Competing interests:** None

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**Fig. 4** Diagram showing the anatomical relationships of a juxtapiillary duodenal diverticulum (JPDD) in: **a** the common type; **b** the atypical caudally located JPDD, which has more anatomical proximity to the pancreatic duct than to the common bile duct. (D, duodenum; BD, bile duct; PD, pancreatic duct; B, bezoar.)

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