

Case Report

Endoscopic ultrasonography diagnosis of long common channel in a patient with recurrent biliary pain

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Abstract

The main pancreatic duct and the common bile duct open into the duodenum either alone or as a common channel. A common channel of > 15 mm is associated with recurrent acute pancreatitis or biliary tract malignancy. Interesting case of young women with recurrent biliary pain where the diagnosis was made by endoscopic ultrasonography.

Key words

Endoscopic ultrasound, long common channel, recurrent acute pancreatitis

Introduction

The CBD and the PD open into the duodenum, where they frequently form a common channel. A long common channel is when this is more than 15 mm. This has been associated different pancreatic problems here is a case of Recurrent Acute Pancreatitis.

Case Report

An 18- year-old female presented with recurrent right upper quadrant pain since 7 years, the pain had increased recently since 2 months for which she sought medical attention. The pain lasted for few hours, was postprandial without any selective radiation. She denied any history of fever, jaundice, vomiting or abdominal distension. Clinical examination was unremarkable. Serum amylase, lipase, and liver function tests were normal. Contrast-enhanced computed tomography abdomen showed common bile duct (CBD) diameter of 12 mm at porta, dilated common hepatic, right and left hepatic ducts without any calculus and thickened GB wall. Endoscopic

ultrasound (EUS) was done echoendoscope with a 7.5-MHz rotating transducer (GF-UE160, EU-ME1 Olympus, Tokyo, Japan), under conscious sedation. EUS showed both the CBD and pancreatic duct (PD) draining into a long common channel measuring 15.1 mm, stack sign was seen, CBD diameter was 10.5 mm [Figure 1 and 2]. No calculi were noted in the CBD or Gallbladder, pancreatic parenchyma was normal. A diagnosis of pancreaticobiliary maljunction (PBM) (long common channel) with biliary dilatation was made and surgical consultation was sought.

Discussion

The CBD and the PD open into the duodenum, where they frequently form a common channel. The incidence of common channel is reported to be from 55%^[1] to 82%.^[2] The length of the common channel ranges from 1 to 12 mm, with an average length of 4.4 mm.^[3] A length of >15 mm is defined as long common channel.^[4] PBM is more common in females, and in Asian population. PBM can be PBM with biliary dilatation and without biliary dilatation.^[4] A long common channel can result in two-way regurgitation (pancreatobiliary reflux and biliopancreatic reflux). Biliopancreatic reflux can result into pancreatitis whereas pancreaticobiliary reflux can cause biliary tract cancer. EUS is able to diagnose long common channel more than 15 mm in all the patients when compared to endoscopic retrograde cholangiopancreatography. The advantage is that there is no risk of pancreatitis or cholangitis.^[5]

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Figure 1: Long common channel and pancreatic duct

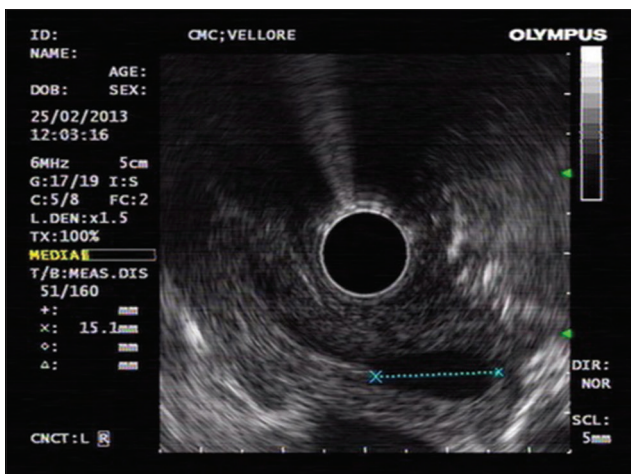


Figure 2: Long common channel and common bile duct

Endoscopic ultrasonography allows definite diagnosis of PBM. Thickened GB wall is often noted in PBM, which is due to

mucosal hyperplasia. Therefore, when thickened GB wall is noted, PBM should be kept in mind. Bile duct and gallbladder cancers are known complications of PBM. EUS can diagnose GB and bile duct cancer; however, it is difficult to distinguish mucosal hyperplasia from early GB cancer.

Once PBM is diagnosed, prophylactic bile duct resection and bilioenteric anastomosis are performed for PBM with biliary dilatation. On the other hand, treatment of PBM without biliary dilatation and without cancer is controversial. Prophylactic cholecystectomy and excision of extrahepatic bile duct are performed by some surgeons, keeping in mind, the risk of GB and bile duct cancer.^[6]

References

1. Sterling JA. The common channel for bile and pancreatic ducts. *Surg Gynecol Obstet* 1954;98:420-4.
2. Suda K, Miyano T, Konuma I, Matsumoto M. An abnormal pancreatico-choledochal junction in cases of biliary tract carcinoma. *Cancer* 1983;52:2086-8.
3. Kimura K, Ohto M, Saisho H, Unozawa T, Tsuchiya Y, Morita M, *et al.* Association of gallbladder carcinoma and anomalous pancreaticobiliary ductal union. *Gastroenterology* 1985;89:1258-65.
4. The Japanese Study Group on Pancreaticobiliary Maljunction. Diagnostic criteria of pancreaticobiliary maljunction. *J Hepatobiliary Pancreat Surg* 1994;1:219-21.
5. Sugiyama M, Atomi Y. Endoscopic ultrasonography for diagnosing anomalous pancreaticobiliary junction. *Gastrointest Endosc* 1997;45:261-7.
6. Tashiro S, Imaizumi T, Ohkawa H, Okada A, Katoh T, Kawaharada Y, *et al.* Pancreaticobiliary maljunction: Retrospective and nationwide survey in Japan. *J Hepatobiliary Pancreat Surg* 2003;10:345-51.

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