Choledochal cysts are rare congenital cystic dilatations of the biliary tree. Almost 80% are discovered during childhood and they are most common in Asian women [1]. They are generally associated with anomalous pancreaticobiliary duct union and treated surgically because of the high risk of biliary malignancy.

Choledochoceles (Todani type III choledochal cysts) are intraduodenal cystic dilatations of the distal bile duct which make up 0.5% to 4% of choledochal cysts [1, 2]. They are unique in that they exhibit even gender distribution and are only rarely associated with anomalous pancreaticobiliary duct union or malignancy. Endoscopic sphincterotomy, unroofing, or cyst resection, therefore, can be considered in lieu of surgery [3, 4].

A 69-year-old woman recovering from endovascular therapy for aortic dissection was referred for evaluation of suspected duodenal cysts. She had no abdominal symptoms or history of biliary stones, pancreatitis, or malignancy. Computed tomography (CT) with contrast revealed a fluid-filled cystic structure at the inferior duodenal angle and a mildly dilated bile duct with no visible obstructive lesions (▶Fig. 1a, ▶Fig. 1b).

Endoscopic ultrasound (EUS) findings. ▶Fig. 2 Endoscopic ultrasound (EUS) findings. a Communication between two cystic structures in the duodenum was observed (white arrow). b Communication between the two cystic structures and the distal bile duct was confirmed (white arrows). c When immersed in water, the cysts (white arrow) were soft and located in the duodenum, completely outside the pancreas. d A duodenal cyst at the superior duodenal angle (white arrow) was indistinguishable from the choledochocele on EUS, except for the communication with the bile duct.

Magnetic resonance cholangiopancreatography (MRCP) revealed one cystic lesion at the superior duodenal angle and two cystic lesions at the inferior duodenal angle with no communication with the bile or pancreatic ducts (▶Fig.1c). Endoscopic ultrasound (EUS) revealed two cystic dilatations in the duodenum which communicated with the bile duct and with each other (▶Fig.2a, ▶Fig.2b, ▶Fig.2c, ▶Video 1). The choledochocele could only be distinguished from a duodenal cyst (▶Fig.2d) by the communication with the bile duct. The patient declined endoscopic treatment because she was asymptomatic and was recovering from aortic dissection.

Choledochal cysts are most often discovered on abdominal ultrasound and diagnosed with MRCP [1]. While CT and MRCP both have sensitivities and specificities of about 90%, neither could demonstrate communication between the intraduodenal cysts and bile duct in this case [1,4,5].

Competing interests
The authors declare that they have no conflict of interest.

The authors

Takeshi Okamoto1,2, Katsuyuki Fukuda2
1 Department of Hepato-Biliary-Pancreatic Medicine, Cancer Institute Hospital of Japanese Foundation for Cancer Research, Tokyo, Japan
2 Department of Gastroenterology, St. Luke’s International Hospital, Tokyo, Japan

Corresponding author

Takeshi Okamoto, MD
Department of Hepato-Biliary-Pancreatic Medicine, Cancer Institute Hospital of Japanese Foundation for Cancer Research, 3-8-31, Ariake, Koto, Tokyo, 135-8550, Japan
Fax: +81-3-3520-0141
tak@alia.jp

References


Bibliography

Endosc Int Open 2021; 09: E1579–E1580
DOI 10.1055/a-1526-1706
ISSN 2364-3722
© 2021. The Author(s).
This is an open access article published by Thieme under the terms of the Creative Commons Attribution-NonDerivative-NonCommercial License, permitting copying and reproduction so long as the original work is given appropriate credit. Contents may not be used for commercial purposes, or adapted, remixed, transformed or built upon. (https://creativecommons.org/licenses/by-nc-nd/4.0/)
Georg Thieme Verlag KG, Rüdigerstraße 14, 70469 Stuttgart, Germany