

A rare cause of biliary colic

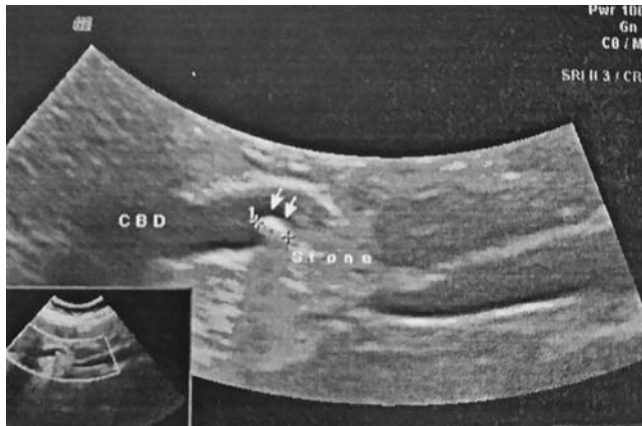


Fig. 1 Abdominal ultrasound image in a 29-year-old woman undergoing evaluation for recurrent biliary colic shows mild dilatation of the common bile duct with a web at its distal end (arrows), misdiagnosed as a small stone. CBD, common bile duct.

A 29-year-old woman presented to our center for the evaluation of recurrent biliary colic. Abdominal ultrasound revealed mild dilatation of the common bile duct (CBD) apparently with a small stone at its distal end (● Fig. 1). The patient underwent endoscopic retrograde cholangiopancreatography (ERCP), which showed mild dilatation of the CBD but no stones. A horizontal filling defect was observed at the distal end of the CBD (● Fig. 2). Lateral fluoroscopic examination showed a small biliary web (● Fig. 3). During a sweep of the CBD with the extraction balloon, mild resistance was encountered at the site of the web, which was then dilated with the balloon (● Fig. 4). Biliary webs are rare, with approximately 20 cases reported in the literature [1]. Most biliary webs are associated with choledocholithiasis as a result of impaired biliary drainage [2]. Although the exact

mechanism behind the formation of webs in the bile ducts is not known, some are believed to be congenital [3]. During the development of the human embryo, the bile ducts pass through a solid stage, in which the lumen becomes obliterated by epithelial proliferation [4]. Recanalization of the biliary tree usually starts at the end of the fifth week of gestation [4]. Incomplete recanalization can lead to the development of a web.

Biliary webs are typically diagnosed by contrast cholangiography or magnetic resonance imaging. Also, direct in vivo cholangioscopic imaging of a biliary web has been reported [5]. During more than 6 months of follow-up evaluation after balloon dilation of the web, our patient has not experienced any biliary problems.

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Fig. 2 Fluoroscopic image shows a horizontal filling defect at the distal end of the common bile duct.

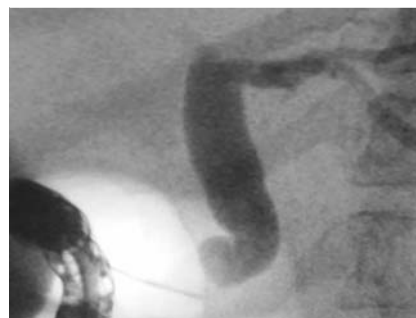


Fig. 3 Lateral fluoroscopic image shows a small biliary web.

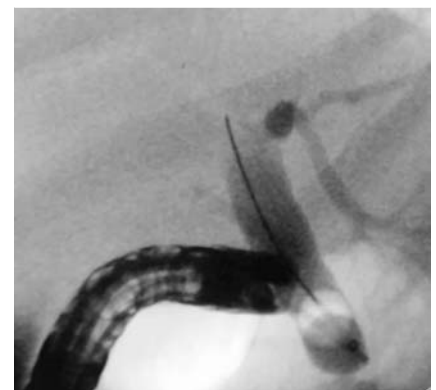


Fig. 4 Balloon dilation of the web.

Competing interests: None

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References

- 1 Shera AH, Shah OJ. Congenital common bile duct web in association with hepatobiliary pancreatic ductal anomalies. *Eur J Pediatr Surg* 2008; 18: 350–351
- 2 Papaziogas B, Lazaridis C, Pavlidis T et al. Congenital web of the common bile duct in association with cholelithiasis. *J Hepatobiliary Pancreat Surg* 2002; 9: 271–273
- 3 Kottoor R, Alvares JF, Devarbhavi H. Successful endoscopic therapy of an obstructing common bile duct web. *Gastrointest Endosc* 2001; 53: 126–128
- 4 Ando H. Embryology of the biliary tract. *Dig Surg* 2010; 27: 87–89
- 5 Parsi MA. Biliary web: diagnosis with high-definition videocholangioscopy. *Clin Gastroenterol Hepatol* 2014; 12: A29. DOI: 10.1016/j.cgh.2013.08.018. Epub 2013 Aug 16

Bibliography

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