

Choledochocele with Normal-Appearing Papilla Before Contrast Injection

Choledochocele is a rare congenital anomaly of the common bile duct and may cause clinical problems such as biliary pain, recurrent pancreatitis, or bile duct stone formation (1,2). An enlarged bulging papilla on duodenoscopy and a cyst-like contrast-filled structure in continuity with the terminal common bile duct on cholangiography are considered diagnostic (3). However, small choledochoceles may be overlooked because a characteristic cyst-

like protrusion may not be evident on duodenoscopy and the distinctive bulbous appearance of the distal common bile duct may not appear unless the cholangiogram is taken meticulously (3).

During the last three years, 17 symptomatic patients were identified as having choledochoceles out of 3,678 ERCPs in our unit. In eight (47%) out of the 17 patients, inspection of the papilla revealed

a hemispherical or pear-shaped bulge protruding into the duodenal lumen. However, nine (53%) had a normal-appearing or even flat papilla before contrast injection (Figure 1a). During contrast injection via a selectively introduced catheter, the initially visible protrusion became larger and flat a papilla showed evenly bulging into the duodenum (Figure 1b).

In our cases, the longest diameter of the choledochoceles was significantly larger (19 ± 4 mm) in patients with a bulging papilla than in those with a normal-appearing papilla (9.3 ± 3 mm) ($p < 0.05$). In those cases with a normal-appearing or flat papilla, if we diagnose the choledochocoele based solely on cholangiographic findings, choledochoceles might be overlooked due to their small size (4). A ballooning papilla or progressive enlargement of the papilla during contrast injection was noted in all cases irrespective of the initial duodenoscopic findings. We could not find the ballooning of the papilla in any other cases without a choledochocoele among our ERCP cases during the last three years. Therefore, to avoid missing a small choledochocoele, watching the papilla carefully during contrast injection may be very important. In conclusion, the ballooning papilla may be an important characteristic duodenoscopic finding of a choledochocoele, especially in small choledochoceles which might be overlooked without careful cholangiographic examination.

M.-H. Kim, S. J. Myung, S. K. Lee,
B. M. Yoo, D. W. Seo, M. H. Lee,
S. A. Jung, Y. I. Min

Dept. of Internal Medicine, Asian Medical
Center, University of Ulsan College
of Medicine, Seoul, Korea

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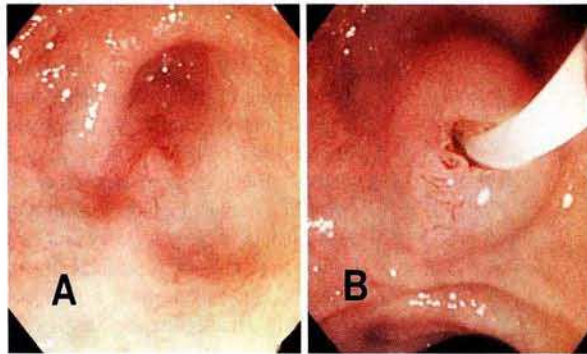


Figure 1: Duodenoscopic finding showing a normal-appearing or flat papilla (a). During contrast injection, the papilla showed bulging into the duodenum (b).

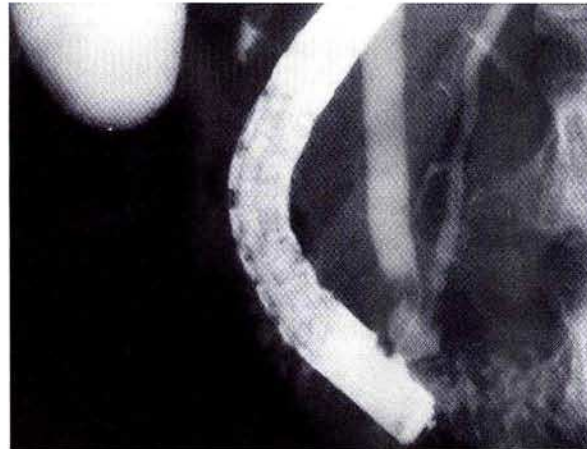


Figure 2: Cholangiographic finding demonstrating a round contrast-filled structure adjacent to the termination of the common bile duct.

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Corresponding Author

M.-H. Kim, M.D.
Dept. of Internal Medicine
Asan Medical Center
388-1 Poongnapdong, Songpagu
Seoul 138-36, Korea
Fax: + 82-24760824