

A 65-year-old patient was admitted to our ward with jaundice due to stone impaction in the common bile duct (CBD), visualized by contrast-enhanced computed tomography. Endoscopic retrograde cholangiography (ERCP) was performed, and after visualization of the main pancreatic duct, the sphincterotome (5-mm/5-Fr cannulotome) was successfully introduced into the first part of the CBD so that opacification of the latter was achieved (Figure 1).

After we had positioned the guide wire (0.035 inch) in the CBD, we encountered unexplained difficulties when trying to achieve deep cannulation by passing the sphincterotome over the guide wire.

To our astonishment, when we retracted the sphincterotome out of the endoscope, we saw that the guide wire had exited the sphincterotome 2.5 cm from the tip of the sphincterotome due to a defect of the latter (Figure 2). Secondly, a retroperitoneal route was seen radiologically, alongside the direction of the CBD (Figure 3).



Figure 1 Visualization of the common bile duct (CBD) and the main pancreatic duct, with the sphincterotome in the distal portion of the CBD.

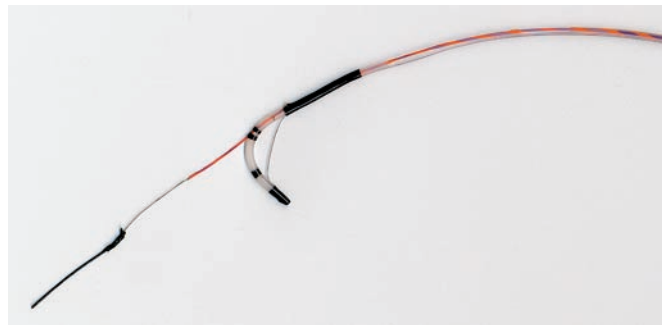


Figure 2 The guide wire exiting the sphincterotome prematurely due to a defect in the sphincterotome.

Thus, on prematurely exiting the defective sphincterotome, the guide wire took an erroneous route in the retroperitoneal space alongside the direction of the CBD, that initially mimicked radiologically the correct position of the guide wire in the CBD.

After reintroduction of a new sphincterotome, deep cannulation was then achieved followed by endoscopic sphincterotomy. Finally, small stone fragments were removed using a balloon catheter. The course of the patient's condition remained uncomplicated, and she was discharged 4 days after the procedure.



Figure 3 Radiological image showing the common bile duct and an accessory retroperitoneal route following the penetrating guide wire.

Previous articles have described retroperitoneal perforation, due to penetration by a guide wire, complicating the endoscopic management of bile duct obstruction [1, 2]. However, to our knowledge, ours is the first description of a case where a defect of the sphincterotome allowed a penetrating guide wire to mimic correct positioning in the CBD.

M. Fried, D. Urbain

Department of Gastroenterology, Academic Hospital, Free University of Brussels (VUB), Brussels, Belgium.

References

- Howard TJ, Tan T, Lehman GA et al. Classification and management of perforations complicating endoscopic sphincterotomy. *Surgery* 1999; 126: 658–663
- Martin DF, Tweedle DE. Retroperitoneal perforation during ERCP and endoscopic sphincterotomy: causes, clinical features and management. *Endoscopy* 1990; 22: 174–175

Corresponding Author

M. Fried, M.D.

Gastroenterology Department
Academic Hospital
Free University of Brussels (VUB)
Laarbeeklaan 101
1090 Brussels
Belgium

Fax: +32-2-4776810

E-mail: michael.fried@az.vub.ac.be