Figure 1: An air cholangiogram in a patient who had previously undergone endoscopic sphincterotomy.

Figure 2: Aspirating the air with a double-lumen balloon occluding the distal common bile duct.

Figure 3: A good-quality balloon occlusion ERC is obtained after the complete removal of the air.

Improving the Quality of Balloon Occlusion Cholangiography by Identifying and Deflating Air Cholangiograms

Choledochoduodenostomy or sphincterotomy may reduce the quality of endoscopic retrograde cholangiography (ERC) by preventing adequate filling of the biliary system with contrast, and by allowing air-contrast mixing. Occlusion of the distal common bile duct by balloon before injection of contrast is a recognized method of improving cholangiography in such cases, but does not solve the problem of air already present in the biliary system. Our policy for these cases is to screen before the injection of contrast, looking specifically for an air cholangiogram. If present, the air can be aspirated completely through a standard double-lumen balloon placed and inflated at the lower end of the common bile duct. When complete deflation is confirmed radiologically, it is possible to obtain high-quality ERC with the balloon still in place, without false-positive filling defects due to air. Although this technique is simple and effective, we have not seen it described elsewhere.

W. Dickey, K. G. Porter

Department of Gastroenterology, Belfast City Hospital and Department of Medicine, Queen's University of Belfast, Belfast, Northern Ireland

Corresponding Author

W. Dickey, M.D.
Department of Medicine
Institute of Clinical Science
Queen's University of Belfast
Grosvenor Road
Belfast BT12 6BJ
United Kingdom