

Use of the FlowerBasketV Rotatable Retrieval Basket in a Patient with Choledocholithiasis

A Case Report by Dr. Peter E. Darwin

Case Report

A 20-year-old white male with a history of primary sclerosing cholangitis presented with epigastric abdominal pain, fever, and jaundice. Endoscopic retrograde cholangiography (ERC) was performed.

Procedure

Upon inspection of the major papilla, there was evidence of a prior patent biliary sphincterotomy. Pus was draining from the major papilla. The bile duct was deeply cannulated using a short-nosed traction sphincterotome. An Olympus 0.035-inch LinearGuideV™ straight guidewire was advanced into the biliary tree. Contrast was injected. Opacification of the entire biliary tree except for the gallbladder was successful. There was diffuse stricturing involving both the left and right intrahepatic branches. The left main hepatic duct, right main hepatic duct, hepatic duct bifurcation, and the upper third of the common bile duct were moderately dilated. The largest diameter was 12 mm.

There was a relative narrowing within the common hepatic duct below the bifurcation and the common bile duct narrowed distally but no critical stenosis was seen. The common bile duct and common hepatic duct contained multiple stones. Balloon extraction of the stones was attempted, but the attempt failed due to the large stone burden and the relative narrowing of the distal common bile duct. (See Figure 1.)

Stone extraction with a standard over-the-wire basket was then attempted, but the stones could not be successfully captured and sweeping the bile duct with the standard over-the-wire basket was ineffective. The decision was made to attempt extraction using the FlowerBasketV™ rotatable retrieval basket (manufactured by Olympus). Using the rotating feature of the FlowerBasketV, the stones were easily captured and extracted. The bile duct was repeatedly and systematically swept with the FlowerBasketV until no additional stones were found. Innumerable stones and a large amount of sludge and pus were removed. (See Figure 2.)

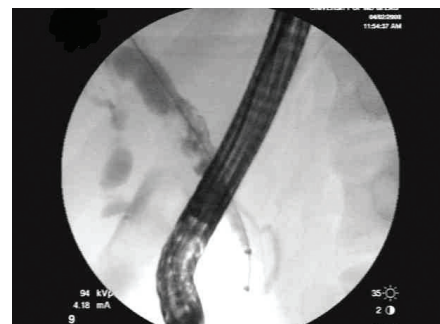


FIGURE 1

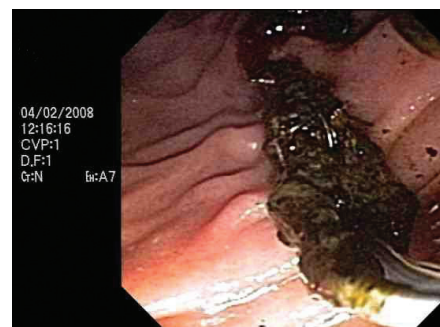


FIGURE 2

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The immediate post-procedure course was uneventful. The patient was discharged on oral antibiotics and clinically improved. One week post-procedure the patient was doing well, without abdominal pain or fever. (See Figure 3.)

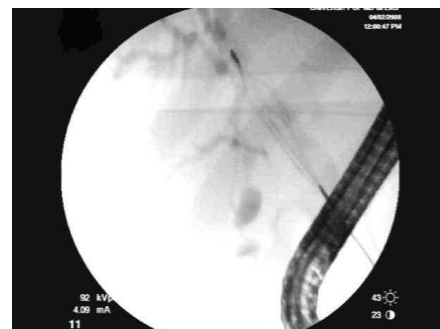


FIGURE 3



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Dr. Darwin serves as the Director of GI Endoscopy in the Division of Gastroenterology at the University of Maryland in Baltimore. He is an Associate Professor at the University's School of Medicine and focuses his primary clinical research in therapeutic endoscopy of biliary and pancreatic disease and unsedated endoscopy.

Dr. Darwin is a paid consultant to Olympus America Inc., Medical Systems Group (Olympus). Olympus did not draft, edit, or provide any substantive input on this Case Report.