

A New Solution for Difficult Cannulations

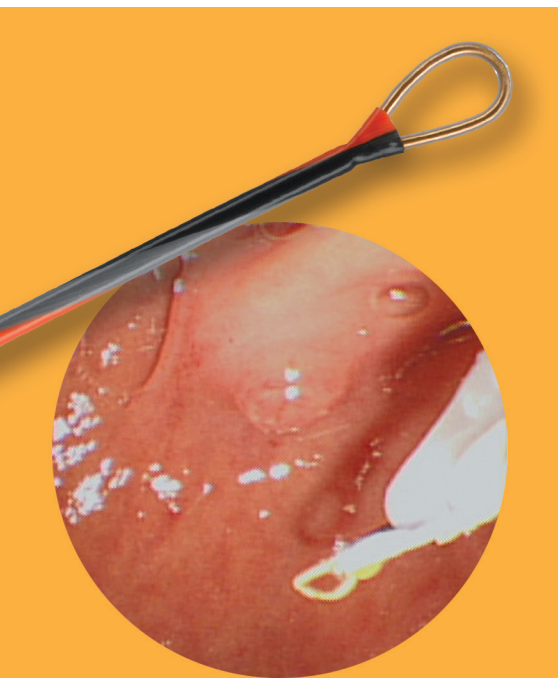


Fig 1. LoopTip wire in catheter



Fig 2. LoopTip in low Common Bile Duct

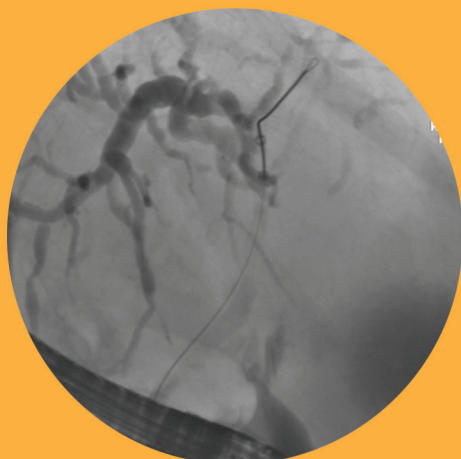


Fig 3. LoopTip in high Common Bile Duct



Dr. Adrian R. W.
Hatfield, MD, FRCP

Director of
Endoscopy,
Consultant
Gastroenterologist,
Department of
PancreatoBiliary
Medicine,
University College
Hospital, London.

Introduction

Although many of the difficulties regarding cannulation and the use of wire guides have been addressed by the development of different sphincterotome design and soft tip hydrophilic wire guides, there are still several areas of ERCP that remain challenging.

The development of the LoopTip wire has helped to overcome some of these remaining problems. Not only does the loop at the distal end avoid catching on folds, but the extra stiffness of the wire helps with advancement through difficult strictures and with subsequent instrumentation.

Difficult cannulation

The LoopTip wire will pass through a standard cannula or sphincterotome with ease (Fig 1). Once introduced into the orifice of the papilla, the LoopTip wire can be advanced through the most difficult papilla by bouncing off the 'fronds' that line the intrasphincteric part of the common channel leading to the bile duct and pancreatic duct. In this situation a hydrophilic or extra flexible wire might still fail to pass as the end jams within the papillary fronds.

Bile duct strictures

Tortuous bile ducts or tight bile duct strictures can still prove a challenge for soft tip hydrophilic wires. Even though the tip of the wire may pass through the stricture, problems are still frequently encountered in passing the wire guide higher up the biliary tree as the extra flexible tip often allows the wire guide to buckle just below the stricture. Sometimes this even pulls the tip of the wire back through the stricture.

In my experience, the LoopTip wire has a distinct advantage in this situation as the shaft is stiffer immediately below the loop and not only is it easy to pass through the stricture, it is then very straightforward to pass further up the bile duct without any buckling (Fig 2).

Catheter exchange

The LoopTip wire comes in three lengths (205 cm, 260 cm and 480 cm) and is very easy for the nursing staff to use for long wire catheter exchanges. In its short wire modes, it is completely user friendly with all aspects of Fusion accessories. It even enhances the effectiveness of the Fusion balloon extraction catheter and Fusion stone basket. When these two devices are used to take out stones there is a tendency for a conventional wire guide to be pulled out of the bile duct if the stone is difficult to extract and ultimately comes out with a sudden movement away from the papilla. I have found that the extra stiffness of the LoopTip wire anchors it within the bile duct to a much greater degree, leading to easier manipulation and a more secure over-the-wire stone extraction.

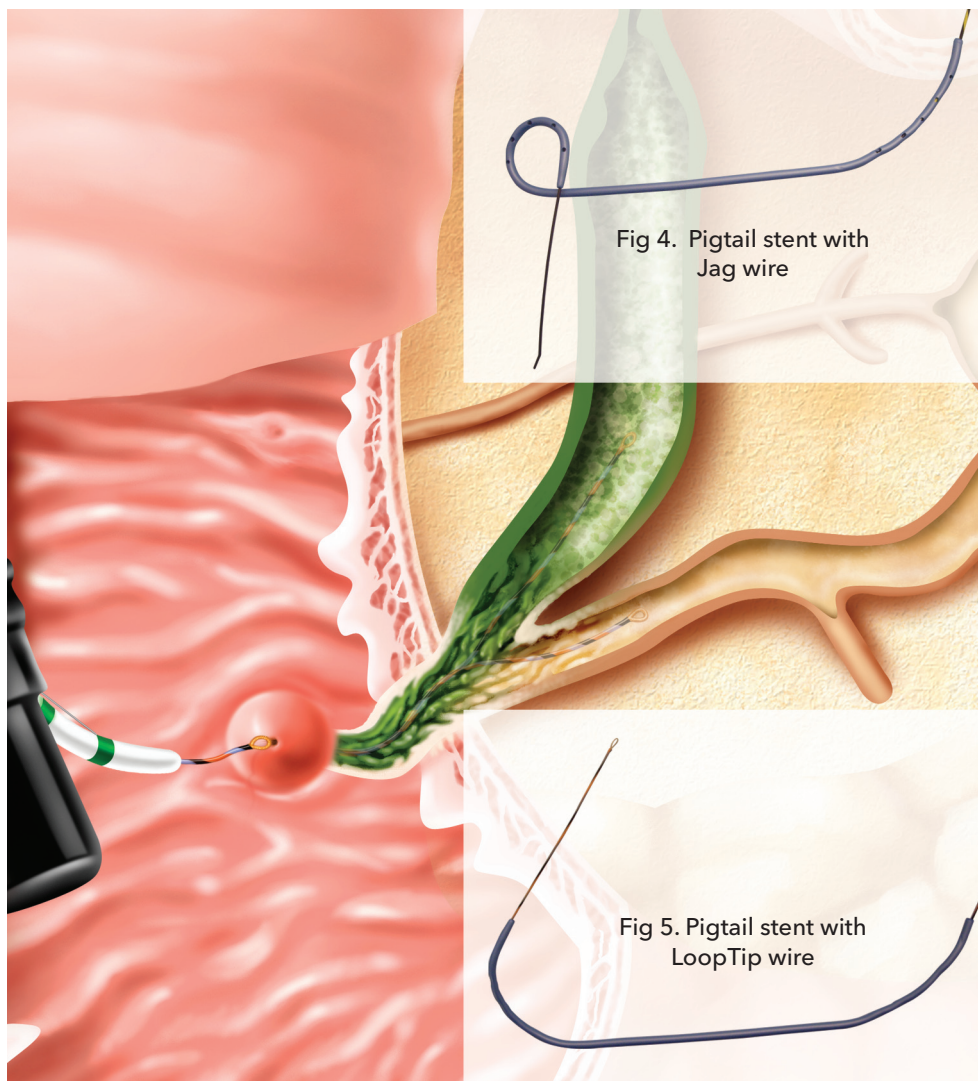
Insertion of biliary stents directly over the wire

Whether inserting a 7 French straight stent directly over a wire or a 10 French stent on an Oasis stent delivery system, a degree of buckling of a conventional wire guide is seen below the stricture due to the increased length of flexibility of most modern wire guides below the 'floppy tip' itself. This will often lead to difficult stent insertion or even, in some cases, wire guide dislodgement from above the stricture, particularly in hilar strictures where it is possible to insert only a little length of wire guide above the stricture (Fig 3).

A NEW SOLUTION FOR DIFFICULT CANNULATIONS Continued on page 11

A NEW SOLUTION FOR DIFFICULT CANNULATIONS

Continued from page 6



Once again, the extra stiffness of the LoopTip right up to the loop tends to lessen the risk of these difficulties.

This is particularly evident in the insertion of a biliary pigtail stent past a difficult gallstone. Often the pigtail stent starts to curve prematurely when it gets to the more flexible part of some wires, well before the ideal site of placement. Once again, the extra stiffness up to the loop makes pigtail stenting much more precise and secure when the LoopTip wire is used (Figs 4, 5, 6, 7).

Pancreatic endotherapy

This is a much more difficult and less commonly performed technique than biliary endoscopic therapy. The procedures in the pancreas are altogether more difficult and the risks of complications higher. The initial advancement of the wire guide along the length of the pancreatic duct can be difficult and both the side ducts and the right angle bend at the 'genu' of the pancreas often cause the tip of the wire to pass into a side branch and fail to advance. The fear of damage to side branches is always a worry if this occurs. I have found that the LoopTip tends to pass around the genu of the main duct and down the length of the pancreas without catching in the side ducts (Fig 8).

When placing a stent, there is less length of wire guide in the pancreatic duct than in the biliary tree. The extra flexibility over a greater length of conventional wire guides, as already mentioned, is a particular problem. The stiffness of the LoopTip wire to the distal end facilitates these difficult procedures in the pancreas.

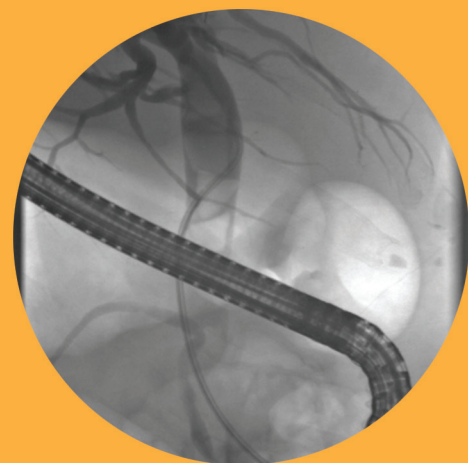


Fig 6. First pigtail stent curving prematurely with Jag wire in high CBD

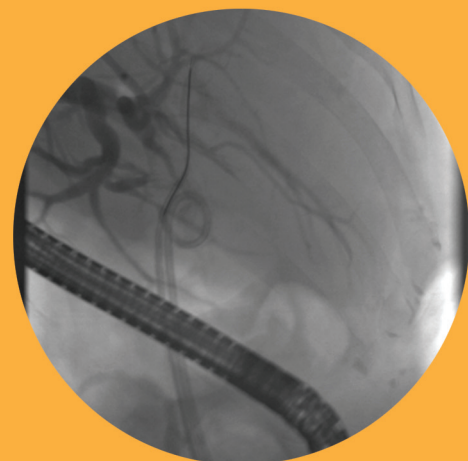


Fig 7. Second pigtail stent keeping straighter with LoopTip in high CBD



Fig 8. LoopTip in Pancreatic Duct