Malleable metal introducer sheath

Indwelling plastic catheter (contains anchor wires and anchor wire sheath)

Metal wire anchors (intrinsic “hook” shape when released from sheath)

Introducer advanced transcutaneously to access common bile duct via intrahepatic biliary system

Catheter advanced beyond introducer and wire anchor system deployed

Anchor wires pulled against intestinal mucosa, introducer removed and catheter secured subcutaneously

Through open abdominal incision, common bile duct ligated and device introduced transcutaneously into biliary system.

Catheter advanced through small enterotomy, anchor wires deployed and catheter unit pulled against common bile duct.