

Sclerosing Cholangitis

A 45-year-old male presents with a ten-year history of ulcerative colitis, which is under good control with medication. For the last year, blood tests show increasing abnormalities of liver function tests (AST 105 I.U., Alkaline Phosphate 580 I. U. and Bilirubin 2 mg %). Recently he has noted mild itching of skin on his chest and back. Otherwise, he feels well. Physical exam is normal except the spleen is enlarged. No skin signs of advanced liver disease were seen. CT scan showed dilated ducts within the liver. The gallbladder and bile ducts outside the liver appeared normal. To evaluate and possibly treat biliary obstruction, an ERCP was done. The ERCP showed irregular narrowing of the common bile and common hepatic ducts typical of primary sclerosing cholangitis with diffuse intrahepatic duct dilation (**Figure 1**). Intraductal stones are seen at the hilum of the liver. At ERCP, a guidewire was passed through the narrowings and these strictures were dilated with a 6 mm diameter balloon (**Figure 2**). Intrahepatic stones were removed. Because some residual narrowing persisted, 2 seven French size plastic stents were placed and itching and blood tests improved by 50 percent. Two months later, the stents were removed at ERCP and the strictures dilated to 8mm. Cholangiogram showed nicely improved patency of strictures (**Figure 3**). The plan is to perform ERCP every 1-2 year's with dilation of any recurrent narrowings.

Comments: Treatment of dominant strictures

in sclerosing cholangitis usually improves liver blood tests and delays liver deterioration or need for liver transplantation. All narrowings will undergo brushings (for biopsy) to rule out cancer, which occurs in approximately 15% of sclerosing cholangitis patients.

Research studies are in progress to evaluate methods to improve cancer detection rates.
Blood tests every 6 – 12 months for CA19-9 may also detect earlier tumors if present.

Figure (1): Irregular narrowing of CBD and CHD typical of PSC with diffuse intrahepatic duct dilation



Figure (2): 6 mm diameter balloon of the stricture



Figure (3): Final cholangiogram showed nicely improved patency of strictures

