

Case Report

A Biliary Tree Takes Root from a TIPS

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Abstract

Herein we describe a case using multiple images of a transjugular intrahepatic portosystemic shunt which is in direct communication of the biliary tree.

Keywords: Transjugular intrahepatic portosystemic shunt; Biliary tree

Case Report

A 70-year-old male with history of cryptogenic cirrhosis and upper gastrointestinal bleeding underwent transjugular intrahepatic portosystemic shunt (TIPS) placement (Figure 1) at an outside hospital. Prior to the TIPS placement, a small amount of thrombus was present in the main portal vein. Once the TIPS were created, there was very little blood flow through the shunt. The plan was to revise the shunt at another time, where additional stents would be added to the exiting shunt proximally to make it longer and closer to the right atrium and distally closer to the porto-splenic confluence to enhance flow. Unfortunately, the TIPS had occluded by the end of the procedure and an attempt at recanalization was unsuccessful. The patient was subsequently transferred to our facility.

At our institution an abdominal ultrasound prior to TIPS revision demonstrated complete thrombosis of the TIPS shunt. The primary team did not want to pursue systemic anticoagulation in order to recanalize the shunt and the patient was scheduled for TIPS revision. Laboratory values prior to and after TIPS revision were stable.

TIPS recanalization via a transjugular approach was unsuccessful. Transhepatic direct puncture of the TIPS tract combined with a transjugular pull-through technique [1] was performed. TIPS venography demonstrated the biliary tree (Figure 2) and revealed



Figure 1: Upper gastrointestinal bleeding underwent transjugular intrahepatic





Figure 2: TIPS venography demonstrated the biliary tree.

occlusion of the portal, proximal superior mesenteric and splenic veins with numerous tortuous mesenteric collateral vessels (Figure 3). TIPS occlusion secondary to bile duct injury has previously been reported [2-3].

The occluded Viatorr stent-graft (W.L. Gore and Associates, Flagstaff, Arizona), was relined with multiple Wallstents (Boston Scientific, Natick, MA) and final venography demonstrated brisk flow through the new shunt (Figure 4).

Abdominal ultrasound performed one day and two weeks following the TIPS revision demonstrated TIPS patency with brisk flow through the shunt. The patient was then discharged from our hospital in stable condition without additional episodes of upper gastrointestinal bleeding.

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Figure 3: Proximal superior mesenteric and splenic veins with numerous tortuous mesenteric collateral vessels.



Figure 4: Final venography demonstrated brisk flow through the new shunt.

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