Using the WallFlex™ Biliary RX Fully Covered Stent System RMV to Manage Post Liver Transplant **Anastromotic Stricture**



CASE PRESENTED BY: ANGELO FERRARI, M.D. **Hospital Albert Einstein** São Paulo, SP. BRAZIL











PATIENT HISTORY

A 65-year-old man was admitted because of jaundice for the last 30 days with some itching in the last week. His total bilirubin was 15.5mg/dl with 12mg/dl of bilirubin direct. Alkaline phosphatase and gama glutamyl transpeptidase were 2-3 times above the normal limit. Platelets were low (53.000/mm³). An abdominal ultrasound showed dilated intrahepatic ducts up to the hepatic hilum.

PROCEDURE

An endoscopic retrograde cholangiopancreatography (ERCP) was performed for biliary drainage. During the procedure there was a tight stricture in an anastomotic area that could not be bypassed by a guidewire (Figures 1 and 2). Percutaneous drainage was considered, but we crossed the stricture endoscopically using a needleknife under radiologic control (Figure 3), as the intrahepatic biliary tree was very dilated. After passing cutting current through the needleknife we were able to reach the dilated intrahepatic biliary tree and a Jagwire™ 0.035" Guidewire was passed to ensure access. A 10mmx80mm WallFlex Biliary RX Fully Covered Stent was deployed without sphincterotomy (Figure 4) or dilatation because of the low platelet count. Deployment was successful with immediate drainage of bile and contrast. Due to the very fibrotic nature of the stricture a waist was clearly noticed after stent deployment (Figure 5). The patient recovered uneventfully from the procedure.

PATIENT OUTCOME

Patient was discharged one day after the procedure and his bilirubin levels were down to 5mg/dl. He is now two months after the index procedure without jaundice or itching and normal liver function tests. A new ERCP will be performed in 5-6 months after the index procedure to remove the WallFlex Biliary RX Stent and evaluate if any further treatment is needed.

DISCUSSION

Biliary complications occur in up to 40% of patients after liver transplantation (orthotopic liver transplant) and are currently managed with multiple plastic stents. Self-expanding metal stents have recently shown encouraging results. There is no study comparing both treatment modalities. We are now performing a randomized controlled trial of multiple plastic stents versus fully covered metallic stents in anastomotic post liver transplantation. Because there is no need for sphincterotomy or dilatation or repeated procedures, even with a higher initial cost in the metal stent groups we believe that full treatment cost may be lower than in the plastic stent group.

NOTE: The WallFlex Biliary RX Fully Covered Stent System RMV is CE marked and available in regions outside of the US with indications for use in the palliative treatment of biliary strictures produced by malignant neoplasms, relief of malignant biliary obstruction prior to surgery and for use in the treatment of benign biliary strictures. In the US the device is indicated for use in the palliative treatment of biliary strictures produced by malignant neoplasms, relief of malignant biliary obstruction prior to surgery and for indwell up to 12 months in the treatment of benign biliary strictures secondary to chronic pancreatitis.

WARNING: The safety and effectiveness of the WallFlex Biliary Stent for use in the vascular system has not been established