

## **BILIODIGESTIVE BYPASS AFTER BISMUTH TYPE III INJURY**

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**Abstract:** Benign bile duct stenosis is mainly caused by intraoperative injury or, later, by scarring bile duct stenosis. Anatomical variations or distortions of the extrahepatic bile ducts, acute or chronic inflammation make it difficult to visualize the cystic-choledochal junction, increasing the risk of accidents, even with experienced surgeons. The report was of a patient with pain in the right hypochondrium, jaundice, pruritus and choloria, which appeared two days after open cholecystectomy. Prior to cholecystectomy, the patient reported biliary colic, with no history of cholestasis; she had undergone an abdominal ultrasound whose gallbladder had evidenced a stone measuring 2.6 cm, and the surgery was performed at another service; after the onset of jaundice, she underwent magnetic resonance cholangiography, demonstrating dilation of the intrahepatic bile ducts and abrupt narrowing of the lumen in the topography of the proximal common hepatic duct, and normal-caliber common bile duct. Surgery was indicated for reconstruction of the bile ducts (45 days after cholecystectomy), performing a biliodigestive bypass through hepatojejunostomy in *Y of Roux*. The patient was clinically stable, with no abdominal pain, nausea and vomiting, and was discharged after 11 days. Thus, it can be seen that the surgical lesion is the main cause of benign bile duct stenosis (95%). In order to avoid such a complication, the surgeons' experience and meticulous technique are of great importance. Successful management of these lesions requires the surgeon's experience with hepatobiliopancreatic pathologies, seeking a definitive resolution in these situations.

**Keywords:** Benign stenosis; bile ducts; Bismuth type III.

## INTRODUCTION

Female patient, 37 years old, from Poço de José de Moura, PB. Admitted to

a tertiary hospital with pain in the right hypochondrium, jaundice, pruritus and choloria, which appeared two days after open cholecystectomy. Prior to cholecystectomy, the patient reported biliary colic, with no history of cholestasis; she had undergone an abdominal ultrasound whose gallbladder had evidenced a stone measuring 2.6 cm, and the surgery was performed at another service; after the onset of jaundice, she underwent magnetic resonance cholangiogram (Figure 1), demonstrating dilatation of the intrahepatic bile ducts and abrupt narrowing of the lumen in the topography of the proximal common hepatic duct, and normal-caliber common bile duct. Surgery was indicated for reconstruction of the bile ducts (45 days after cholecystectomy), performing a biliodigestive bypass through hepatojejunostomy in *Y of Roux*. He evolved clinically stable, with no abdominal pain, nausea and vomiting, and was discharged after 11 days.

## DISCUSSION

Benign bile duct stenosis is mainly caused by intraoperative injury or, later, by scarring bile duct stenosis. Anatomical variations or distortions of the extrahepatic bile ducts, acute or chronic inflammation make it difficult to visualize the cystic-choledochal junction, increasing the risk of accidents, even with experienced surgeons.

Resonance cholangiography is the test of choice for the assessment of jaundice in suspected bile duct injury/stenosis; the mapping of the biliary tree allows a more accurate diagnosis of the lesion site. In this patient, the surgical finding of a lesion at the confluence of the hepatic ducts (Bismuth III classification) corroborated the imaging test hypothesis (Figure 2) The literature recommends the surgical correction of this lesion pattern in a tertiary hospital, with surgeons used to operating



Figure 1: Mild dilatation of the intrahepatic biliary tree with abrupt stenosis at the level of the proximal common hepatic duct.

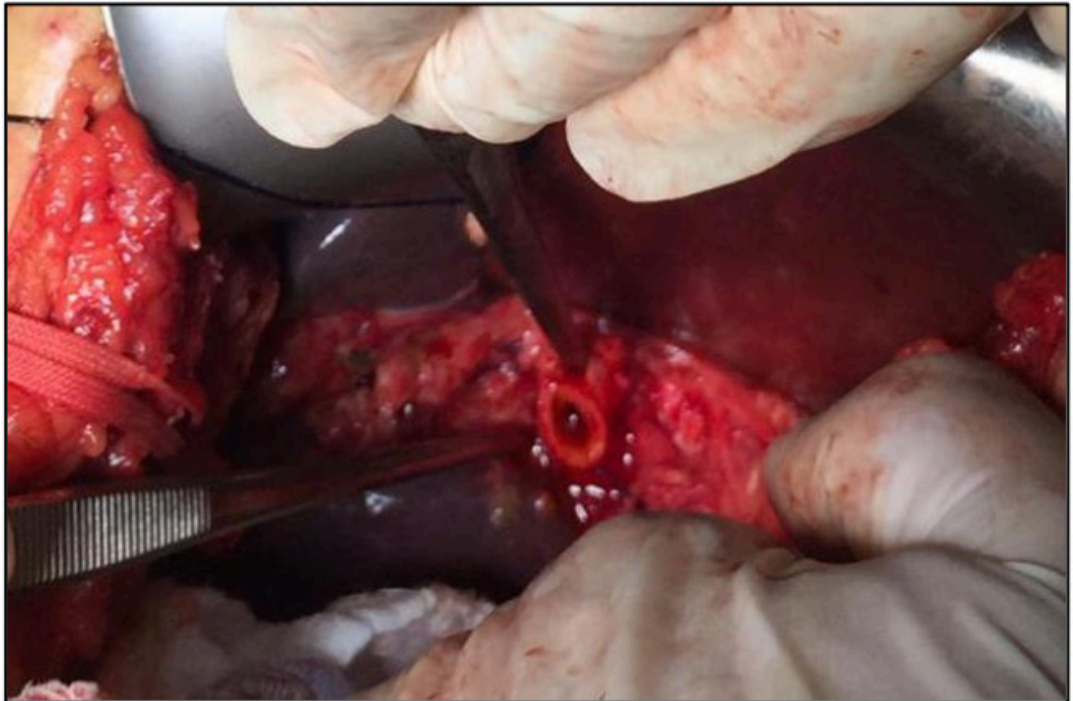


Figure 2: Identification of dilated bile duct in topography of the confluence of the hepatic ducts.

hepatobiliopancreatic glands, and that's how this case was conducted.

## FINAL CONSIDERATIONS

Surgical injury is the main cause of benign bile duct stenosis (95%). In order to avoid such a complication, the surgeons' experience

and meticulous technique are of great importance. Therefore, in order to successfully manage these lesions, the surgeon must have experience with hepatobiliopancreatic pathologies, seeking a definitive resolution in these situations.

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