

Biliary tract intraductal papillary mucinous neoplasm: single-operator cholangioscopy and clearance of mucin obstruction

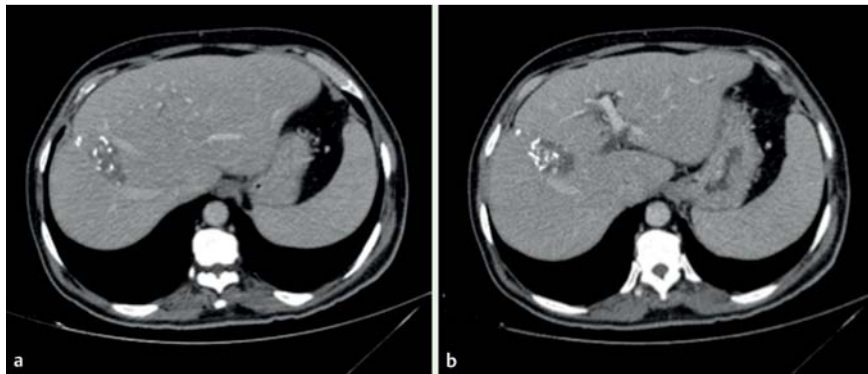


Fig. 1 a, b Biliary duct dilatation seen at abdominal computed tomography (CT), in a 49-year-old man presenting with obstructive jaundice and abdominal pain.

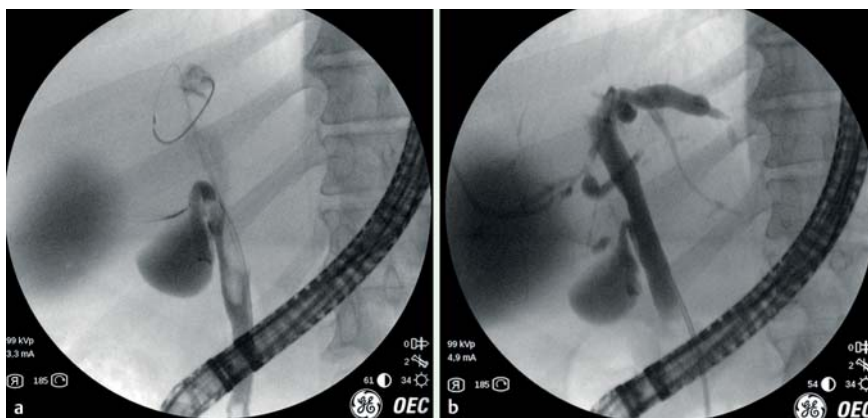


Fig. 2 a, b Endoscopic retrograde cholangiopancreatography (ERCP) showed amorphous filling defects of the common bile duct and occlusion of the right intrahepatic duct.



Fig. 3 Biliary lesion seen at single-operator cholangioscopy.



Biliary tract intraductal papillary mucinous neoplasm: clearance of mucin clot and Spy-Glass cholangioscopy-guided biopsies.

Biliary tract intraductal papillary mucinous neoplasm (BT-IPMNs) are the counterparts of pancreatic IPMNs, and are characterized as papillary lesions that produce mucin and spread along the biliary mucosa causing obstructive jaundice [1]. These tumors can develop anywhere along the biliary tree, and are considered to be premalignant lesions [2]. We report a case of a BT-IPMN diagnosed by cholangioscopy-guided biopsy, and a novel technique of clearing the biliary tree with a mucolytic solution.

A 49-year-old man presented with obstructive jaundice (serum bilirubin 15 mg/dL) and abdominal pain. Contrast computed tomography showed focal dilatation of bile ducts in segments IV and VIII and dilatation of the common bile duct, with no stones or adenopathy (► Fig. 1a, ► Fig. 1b). Endoscopic retrograde cholangiopancreatography (ERCP) detected amorphous filling defects of the common bile duct with poor opacification of the intrahepatic ducts, especially at the right side (► Fig. 2a, ► Fig. 2b). As a mucin clot was obstructing bile flow, a 5-minute wash with mucolytic agent (n-acetyl cysteine) through an inflated extractor balloon (► Video 1) was done to improve clearance. Single-operator cholangioscopy (SpyGlass; Boston Scientific, Natick, Massachusetts, USA) was performed to evaluate the extent and involvement of the tumor growth within the bile duct as well as to provide direct-view biopsies (► Fig. 3). A protruded, friable 8-mm lesion, located in the right intrahepatic duct, was biopsied and histopathological examination revealed a mucinous papillary neoplasm without dysplasia (► Fig. 4a, ► Fig. 4b). The patient recovered without adverse events, his serum bilirubin levels decreased to 2 mg/dL, and a surgical resection was planned.

BT-IPMN is a rare variant of bile duct tumor, with malignancy varying on several reports to as high as 64%–89% [1,3,4]. Clinical presentations include abdominal pain, jaundice, and acute cholangitis. Peroral cholangioscopy can assess the spread of the tumor and allows histological confirmation, providing better information for surgical planning [5]. We undertook a novel approach of mucin removal by injection of a mucolytic agent, thus improving biliary clearance before surgery.

Endoscopy_UCTN_Code_TTT_1AR_2AD

Competing interests: None

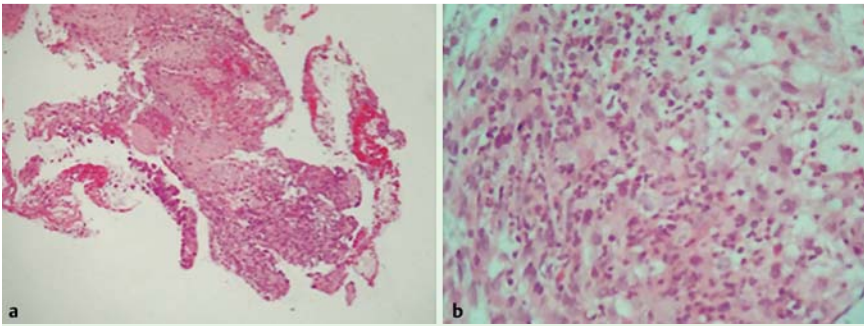


Fig. 4 a,b Histopathological appearances of a mucinous papillary neoplasm.

Tomazo Franzini¹, Renata Nobre Moura¹, Silvia L. Alves de Lima¹, Gustavo Rodela¹, Frederico Ribeiro Teixeira Jr², Humberto Kishi³, Eduardo Guimarães Hourneax de Moura¹

¹ Endoscopy Unit, Department of Gastroenterology, University of Sao Paulo Medical School, Brazil

² Department of General Surgery, University of Sao Paulo Medical School, Brazil

³ Department of Pathology, University of Sao Paulo Medical School, Brazil

References

- 1 Ohtsuka M, Shimizu H, Kato A et al. Intraductal papillary neoplasms of the bile duct. *Int J Hepatol* 2014. Article ID 459091. DOI: 10.1155/2014/459091
- 2 Barton JG, Barrett DA, Maricevich MA et al. Intraductal papillary mucinous neoplasm of the biliary tract: a real disease? *HPB (Oxford)* 2009; 11: 684–691
- 3 Wang X, Cai YQ, Chen YH et al. Biliary tract intraductal papillary mucinous neoplasm: report of 19 cases. *World J Gastroenterol* 2015; 21: 4261–4267

4 Rocha FG, Lee H, Katabi N et al. Intraductal papillary neoplasm of the bile duct: a biliary equivalent to intraductal papillary mucinous neoplasm of the pancreas? *Hepatology* 2012; 56: 1352–1360

5 Moura EG, Franzini T, Moura RN et al. Cholangioscopy in bile duct disease: a case series. *Arq Gastroenterol* 2014; 51: 250–254

Bibliography

DOI <http://dx.doi.org/10.1055/s-0042-105564>
Endoscopy 2016; 48: E150–E151
 © Georg Thieme Verlag KG
 Stuttgart · New York
 ISSN 0013-726X

Corresponding author

Tomazo Franzini, MD
 Av. Dr. Enéas de Carvalho Aguiar 255
 Prédio dos Ambulatórios
 Pinheiros
 Sao Paulo 05403-000, SP
 Brasil
 Fax: +55-11-26616460
 tomazof@uol.com.br