

# Biliary intraductal papillary-mucinous neoplasm in the left hepatic lobe diagnosed by endoscopic ultrasonography: Report of a case

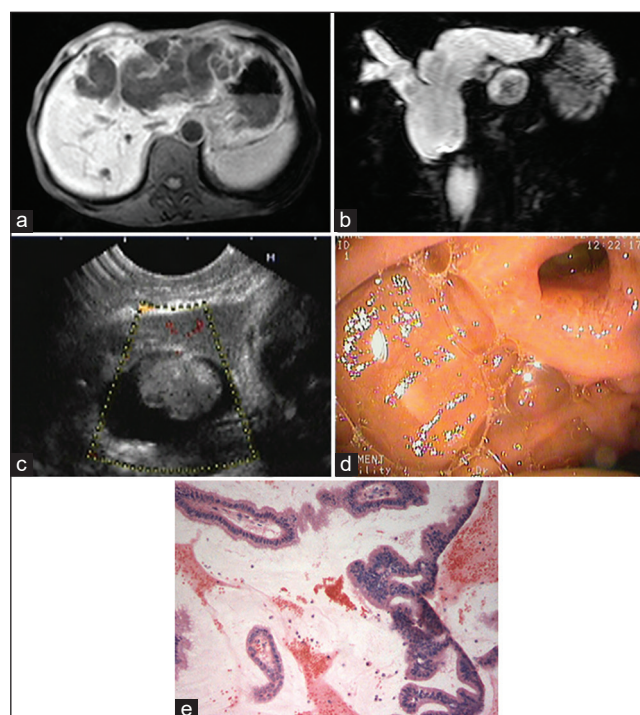
Jintao Guo, Zhijun Liu<sup>1</sup>, Siyu Sun, Yafei Qi<sup>2</sup>

Endoscopic Center, <sup>1</sup>Departments of Ultrasound and <sup>2</sup>Pathology, The Shengjing Hospital, China Medical University, Shenyang, Liaoning Province, China

The intraductal papillary neoplasm of the bile duct (IPN-B) is characterized by dilated intrahepatic bile ducts filled with papillary or villous neoplastic biliary epithelium. IPN-B is a rare, but increasingly diagnosed clinical entity.

A 59-year-old female with multiple episodes of abdominal pain and fever was referred to the hospital. The CA-199 was 43.49 U/mL (normal: 0-37 U/mL). The total bilirubin was 30.4  $\mu$ mol/L, and conjugated bilirubin was 25.9  $\mu$ mol/L. Magnetic resonance imaging (MRI) prompted the presence of dilated intrahepatic bile duct (especially the left hepatic lobe) and common bile duct [Figure 1a and b]. No calculus or neoplasm was seen by MRI. Endosonography (endoscopic ultrasonography [EUS]) showed an isoechoic mass (11 mm) located within the dilated intrahepatic bile duct [Figure 1c]. A dilated orifice of duodenal papilla with visible mucus secretion was found on EUS [Figure 1d].

The patient underwent a left hepatectomy and duodenectomy with common bile duct reimplantation. The pathological diagnosis after surgery showed an intraductal papillary mucinous neoplasm with severe



**Figure 1.** (a and b) The examination of nuclear magnetic resonance imaging prompted the presence of dilated intrahepatic bile duct and common bile duct. The dilation of left hepatic lobe was more predominance. (c) In ultrasound imaging, a macroscopic papillary appearance was observed in the left hepatic lobe accompany with dilated intrahepatic bile duct and common bile duct. (d) In endoscopic imaging, we can observe that the opening of duodenal papilla was very flaccida with visible mucus secretion. (e) The pathological diagnosis after surgery was intraductal papillary mucinous neoplasm with severe atypical hyperplasia of the left hepatic lobe (H and E, dyeing,  $\times 200$ )

atypical hyperplasia [Figure 1e]. The patient recovered and discharged from hospital about 20 days after the surgery.

## Access this article online

### Quick Response Code:



### Website:

www.eusjournal.com

### DOI:

10.4103/2303-9027.187894

## Address for correspondence

Dr. Siyu Sun, Endoscopic Center, The Shengjing Hospital, China Medical University, Shenyang 110011, Liaoning Province, China.

E-mail: sunsy@sj-hospital.org

Received: 2014-08-04; Accepted: 2015-12-04

## DISCUSSION

Intraductal papillary mucinous neoplasm of the bile duct (IPMN-B) is an uncommon tumor.<sup>[1]</sup> Patients with this disease usually experience multiple episodes of abdominal pain, fever, and jaundice. Many of these patients are followed-up for an extended period because these clinical features closely resemble those of choledocholithiasis. The frequency of computed tomography in the detection of IPMN-B was <50%.<sup>[2]</sup> Endoscopic retrograde cholangiography often fails to diagnose and localize these tumors, due to the thick mucin that fills the dilated biliary tree.<sup>[3]</sup>

## CONCLUSION

Endoscopic ultrasonography is an alternative procedure for diagnosis of IPMN-B. The characteristic image of IPMN-B under EUS is a papillary mass located within dilated the bile duct, accompany with dilated orifice

of duodenal papilla with visible mucus secretion. The prognosis of IPN-B after curative resection is more favourable compared with other types of bile duct carcinoma or intrahepatic cholangiocarcinoma.

## REFERENCES

1. Paik KY, Heo JS, Choi SH, *et al.* Intraductal papillary neoplasm of the bile ducts: The clinical features and surgical outcome of 25 cases. *J Surg Oncol* 2008;97:508-12.
2. Itoh S, Nagasaka T, Suzuki K, *et al.* Lymphoplasmacytic sclerosing cholangitis: Assessment of clinical, CT, and pathological findings. *Clin Radiol* 2009;64:1104-14.
3. Tsou YK, Liu NJ, Wu RC, *et al.* Endoscopic retrograde cholangiography in the diagnosis and treatment of mucobilia. *Scand J Gastroenterol* 2008;43:1137-44.

**How to cite this article:** Guo J, Liu Z, Sun S, Qi Y. Biliary intraductal papillary-mucinous neoplasm in the left hepatic lobe diagnosed by endoscopic ultrasonography: Report of a case. *Endosc Ultrasound* 2016;5:274-5.

**Source of Support:** Nil. **Conflicts of Interest:** None declared.