# Japanese Journal of Gastroenterology and Hepatology

#### Case Report

ISSN 2435-1210 | Volume 5

## Intraductal Papillary Neoplasia of the Bile Ducts (IPN-B): About a Case

Zatir S\*, Ouguerti N, Arbouz M, Bouchakour S, Laouisset S, kroumli B, Abdellaoui K, Belkherour A, allam A and larkaam T Department of medical and surgical emergency, Oran University Military Hospital Algeria

*Corresponding author: Zatir Soufiane, Department of medical and surgical emergency, Oran University Military Hospital Algeria, E-mail: s.zatir@yahoo.com	Received: 23 Dec 2020 Accepted: 26 Dec 2020 Published: 07 Jan 2021	<b>Copyright:</b> ©2021 Zatir S. This is an open access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and build upon your work non-commercially.
<b>keywords:</b> Neoplasia; Ampulloma; Biliary; Papillary		<b>Citation:</b> Zatir S. Intraductal Papillary Neoplasia of the Bile Ducts (IPN-B): About a Case. Japanese J Gstro Hepato. 2021; V5(9): 1-3.

#### 1. Abstract

Intraductal papillary neoplasia of the bile ducts (IPN-B) is a rare intracanal tumor characterized by papillary proliferation of the biliary epithelium responsible for more or less abundant production of mucus, causing dilation of the duct [1]. IPN-B is the "biliary" equivalent of TIPMP. MRI cholangiography and transcutaneous abdominal ultrasound are the best examinations to suggest the diagnosis in the presence of a cystic lesion of the biliary tree associated with dilation of the downstream duct [2, 3]. The distribution of histological forms is different with a predominance of gastric forms in TIPMP and pancreatobiliary forms in IPN-B explaining a much better prognosis of TIPMP, surgical treatment is the gold standard given the high risk of malignancy. we discuss a case of a 60-year-old patient operated on for IPN-B who underwent duodenpancreaticocephalus.

#### 2. Introduction

Intraductal papillary mucinous tumor of the bile ducts bears a striking similarity to intraductal papillary mucinous tumor of the pancreas in its histopathologic features, production of a large amount of mucin, pathophysiologic characteristics, and resultant clinical manifestations [7]. Because of the shared origins of the biliary tract and pancreas, the two systems may have a homologous pathologic condition [4, 5]. Reports have been published that describe tumors involving both the bile ducts and the pancreatic duct [6]. In this article, the radiologic features of intraductal papillary mucinous tumor of the bile ducts are described and correlated with clinical, surgical, and histopathologic findings. we will discuss a case of a patient operated on for IPBN degenerated into cholangiocarcinoma and the different stages of diagnosis and treatment.

### 3. Cas Clinique

This is the 60-year-old BN patient, admitted to the service for treatment of an IPNB tumor degenerated into carcinoma, the patient's history seems to go back 2 months ago with the appearance of cholestatic jaundice with pain in the level of the right hypochodre. to support the diagnosis, laboratory and radiological examinations were performed.

A biological assessment which returned in favor of a frank cholestasis syndrome. in front of this table an abdominal ultrasound was carried out which aims at dilation of the bile ducts intr and extrahepatic without visualization of obstacle.an MRI cholangio was performed which revealed a tumor mass of 2 cm from the lower common bile duct see thickening of vater lampoul with dilation upstream of the obstacle (Figure 1, 2). Echoendoscopy was performed which revealed the presence of a vator ampulla tumor with thickening of the lower bile duct suggesting a vaterian ampulloma with the presence of a probable mucus discharge (Figure 3). biopsies were performed in favor of a carcinoma. Retrograde cholangiography was performed with the placement of an endoscopic bypass prosthesis (Figure 4).

we prepared the patient for a surgical procedure. After anesthesiological agreement we performed a cephalic duodenopancreatectomy with triple anastomoses, gastrointestinal, pancreaticojujenale and hepaticojujenale (Figure 5). The patient was discharged on the 11th postoperative day in good general condition. planapath returned in favor of an IPNB of vater bulb degenerated into adenocarcinoma (Figure 6).

1

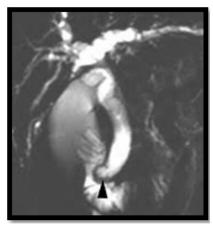


Figure 1



Figure 2



Figure 3



Figure 4

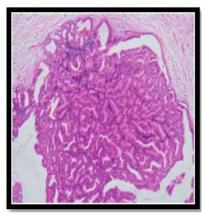


Figure 5



Figure 6

#### 4. Discussion

IPNB is a rare tumor, initially described in 1976 as multicentric biliary papillomatosis associated with invasive adenocarcinoma. In 2006, Zen et al [9] reported ten cases of papillary biliary tumors, described the histopathologic features and classified the tumor cells into three subtypes including pancreatico-biliary, intestinal and gastric subtype. Oncocytic type was believed to be a variant of the pancreatico-biliary type [10]. In this article the name of Intraductal Papillary Neoplasm of Bile Duct (IPNB) was given for the first time to this distinct new entity which included biliary papilloma, papillomatosis and papillary adenocarcinoma [11]. In 2010, IPNB was included in the WHO classification of the bile duct tumors. The differential diagnosis of IPBN includes two entities with different histomorphology and prognosis: hepatic mucinous cystic neoplasm (HMCN) and cholangiocarcinoma (CCA) [12]. HMCN is defined as a cyst-forming epithelial neoplasm with typical ovarian-type stroma but with no communication with the bile ducts. For IPNB patients without metastasis, surgical intervention is still the first choice of treatment including pancreaticoduodenectomy (31%), hemihepatectomy (28%), bile duct resection (18%), segmental liver resection (15%) and liver transplant (5%) [14, 15-20].

#### 5. Conclusion

Intraductal Biliary Papillary Neoplasia (IPNB) is a rare disease involving both the intrahepatic and the extrahepatic biliary tract. It usually occurs in the 6th and 7th decades of life and may present with acute cholangitis. The pathogenesis, clinical features and outcome are not well documented. Because of the high risk of malignant transformation, surgical resection is the best choice of treatment.

#### References

- Jung G, Park KM, Lee SS, Yu E, Hong SM, Kim J et al. Long-term clinical outcome of the surgically resected intraductal papillary neoplasm of the bile duct. J Hepatol. 2012; 57: 787-93.
- Rocha FG, Lee H, Katabi N, DeMatteo RP, Fong Y, D'Angelica MI et al. Intraductal papillary neoplasm of the bile duct: a biliary equivalent to intraductal papillary mucinous neoplasm of the pancreas? Hepatology. 2012; 56: 1352–60.
- Wan XS, Xu YY, Qian JY, Yang XB, Wang AQ, He L et al. Intraductal papillary neoplasm of the bile duct. World J Gastroenterol. 2013; 19: 8595–8604.
- Yeh TS, Tseng JH, Chiu CT, Liu NJ, Chen TC, Jan YY et al. Cholangiographic spectrum of intraductal papillary mucinous neoplasm of the bile ducts. Ann Surg. 2006; 244: 248–253.
- Zen Y, Fujii T, Itatsu K, Nakamura K, Minato H, Kasashima S et al. Biliary papillary tumors share pathological features with intraductal papillary mucinous neoplasm of the pancreas. Hepatology. 2006; 44: 1333–43.
- Schlitter AM, Born D, Bettstetter M, Specht K, Kim-Fuchs C, Riener MO et al. Intraductal papillary neoplasms of the bile duct: stepwise progression to carcinoma involves common molecular pathways. Mod Pathol. 2014; 27: 73–86.
- Zen Y, Pedica F, Patcha VR, Capelli P, Zamboni G, Casaril A, Quaglia A, Nakanuma Y, Heaton N, Portmann B. Mucinous cystic neoplasms of the liver: a clinicopathological study and comparison with intraductal papillary neoplasms of the bile duct. Mod Pathol. 2011; 24: 1079–89
- Sasaki M, Matsubara T, Nitta T, Sato Y, Nakanuma Y. GNAS and KRAS mutations are common in intraductal papillary neoplasms of the bile duct. PLoS One. 2013; 8: e81706.
- Kubota K, Nakanuma Y, Kondo F, Hachiya H, Miyazaki M, Nagino M et al. Clinicopathological features and prognosis of mucin-producing bile duct tumor and mucinous cystic tumor of the liver: a multi-institutional study by the Japan Biliary Association. J Hepatobiliary Pancreat Sci. 2014; 21: 176–185.
- Naito Y, Kusano H, Nakashima O, Sadashima E, Hattori S, Taira T et al. Intraductal neoplasm of the intrahepatic bile duct: clinicopathological study of 24 cases. World J Gastroenterol. 2012; 18: 3673–80.
- Yang J, Wang W, Yan L. The clinicopathological features of intraductal papillary neoplasms of the bile duct in a Chinese population. Dig Liver Dis. 2012; 44: 251–6.
- Onishi I, Kitagawa H, Harada K, Maruzen S, Sakai S, Makino I et al. Intraductal papillary neoplasm of the bile duct accompanying biliary mixed adenoneuroendocrine carcinoma. World J Gastroenterol. 2013; 19: 3161-4.
- 13. Watanabe A, Suzuki H, Kubo N, Araki K, Kobayashi T, Sasaki S et al.

An Oncocytic Variant of Intraductal Papillary Neoplasm of the Bile Duct that Formed a Giant Hepatic Cyst. Rare Tumors. 2013; 5: e30.

- Shimoda T, Yoshida H, Hirakata A, Makino H, Yokoyama T, Maruyama H et al. Surgical resection of cystic intraductal papillary adenocarcinoma of the bile duct: report of a case. J Nippon Med Sch. 2013; 80: 234-9.
- Lim JH, Zen Y, Jang KT, Kim YK, Nakanuma Y. Cyst-forming intraductal papillary neoplasm of the bile ducts: description of imaging and pathologic aspects. AJR Am J Roentgenol. 2011; 197: 1111-20.
- Zen Y, Amarapurkar AD, Portmann BC. Intraductal tubulopapillary neoplasm of the bile duct: potential origin from peribiliary cysts. Hum Pathol. 2012; 43: 440-5.
- Dong A, Dong H, Zhang L, Zuo C. F-18 FDG uptake in borderline intraductal papillary neoplasms of the bile duct. Ann Nucl Med. 2012; 26: 594-8.
- Takanami K, Hiraide T, Kaneta T, Hayashi H, Unno M, Fujishima F et al. FDG PET/CT findings in malignant intraductal papillary mucinous neoplasm of the bile ducts. Clin Nucl Med. 2010; 35: 83–85.
- 19. Nakanishi Y, Nakanuma Y, Ohara M, Iwao T, Kimura N, Ishidate T et al. Intraductal papillary neoplasm arising from peribiliary glands connecting with the inferior branch of the bile duct of the anterior segment of the liver. Pathol Int.
- Kim BS, Joo SH, Lim SJ, Joo KR. Intrahepatic biliary intraductal papillary mucinous neoplasm with gallbladder agenesis: case report. Surg Laparosc Endosc Percutan Tech. 2012.