

Correspondence: Dr. Nidhi Goyal
Department of Pathology,
Maulana Azad Medical College
New Delhi, India
Email: goyal_nidhi@rediffmail.com

References

1. Sridhar VB, Peter JH: Acute GI and Surgical complications of *Ascaris lumbricoides* infection. *Infect Med* 2003; **20**:154–9
2. Efem SE. *Ascaris lumbricoides* and intestinal perforation. *Br J Surg.* 1987;**74**:643–4.
3. Surendran N, Paulose MO. Intestinal complications of round worms in children. *J Pediatr Surg.*1988;**23**:931–5.
4. Khuroo MS. Ascariasis. *Gastroenterol Clin North Am.* 1996;**25**:553–77.

Multicentric biliary papillomatosis with synchronous gallbladder malignancy

Introduction

Adenomas and papillomas of gallbladder are quite uncommon. We present here a case of a 54-year-old female with gallbladder papillomatosis.

Case report

A 54 year old patient presented with the history of a right upper quadrant mass and typical biliary symptoms. Abdominal examination revealed a firm globular mass in the right hypochondrium, consistent with a mass originating from the gallbladder. The patient's hemoglobin was 12.6 g/dl, and WBC count was 8,500/mm³ (neutrophil 76%, lymphocyte 21%, and eosinophil 3%). Carcinoembryonic antigen and CA 19-9 were normal. Chest X-ray was normal. Pre-operative diagnosis was suggested by USG abdomen and CECT which showed a gallbladder mass. FNAC reported it to be an adenocarcinoma. A radical cholecystectomy with CBD excision and Roux-en-Y hepaticojejunostomy was performed. Gross description and microscopic examination confirmed the diagnosis of benign diffuse papillomatosis involving the entire mucosal surface of the gallbladder, cystic duct and bile duct. Histopathology revealed multicentric papillomatosis with in-situ

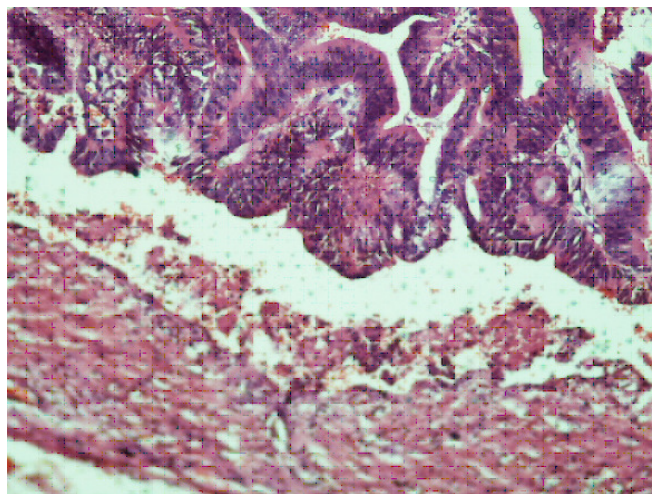


Figure 1a. H & E section of gallbladder showing polypoidal projections, mucin and in situ carcinoma

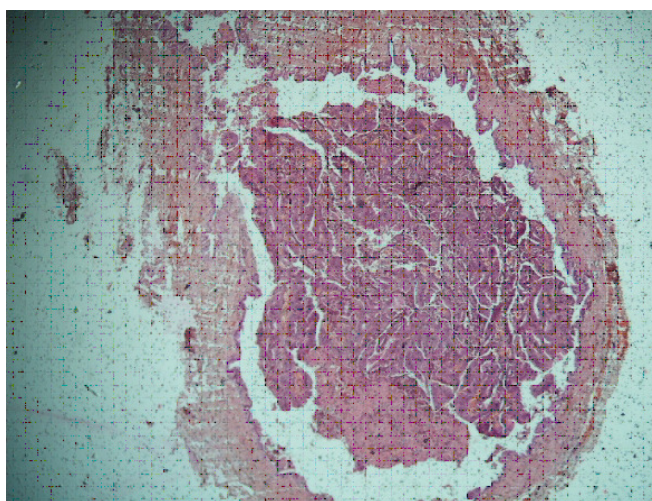


Figure 1b. H & E section of bile duct showing polyps and mucin

adenocarcinoma of the gallbladder (Stage T1a) (**Figure 1a & b**).

Discussion

Polypoid preinvasive lesions of the biliary tract have been termed “adenomas”, “papillomas”, “papillomatosis (adenomatosis)”, and “papillary adenocarcinomas”, based on their growth pattern, multiplicity, extent and degree of malignant change.¹⁻³ Conceptually, these lesions represent the biliary counterpart of colonic adenomas and follow a similar adenoma-carcinoma sequence. Some of the clinical and pathologic characteristics of these lesions are similar to pancreatic intraductal papillary mucinous neoplasms, which has led some authors to refer to these tumors as “biliary intraductal papillary mucinous neoplasms”.¹ Adenomas occur predominantly in

women. Approximately 10% are multiple. Some may cover the entire surface of the mucosa, in which case the term “papillomatosis” or “adenomatosis” is used. Adenomas have been reported in association with Peutz-Jeghers syndrome,⁴ Gardner’s syndrome, with anomalous union of the pancreatobiliary duct and nearly half are associated with cholelithiasis. The relative frequency of carcinomatous transformation among different subsets of mass-forming intramucosal neoplasia is unknown. It seems, however, that carcinomatous transformation is quite uncommon in pyloric gland adenomas. In contrast, the association of papillomatosis with carcinoma seems quite strong.

KHAN MA
SINGH I

*Correspondence: Dr. Mohd. Atif Khan
Department of General Surgery
Fortis Hospital,
Mohali, Punjab, India
Email: dratifkhan@rediffmail.com*

References

- 1 Kim HJ, Kim MH, Lee SK, Yoo KS, Park ET, Lim BC, et al. Mucin-hypersecreting bile duct tumor characterized by a striking homology with an intraductal papillary mucinous tumor (IPMT) of the pancreas. *Endoscopy*. 2000;**32**:389–93.
- 2 Abraham SC, Lee JH, Hruban RH, Argani P, Furth EE, Wu TT. Molecular and immunohistochemical analysis of intraductal papillary neoplasms of the biliary tract. *Hum Pathol*. 2003;**34**:902–10.
- 3 Almagro UA. Diffuse papillomatosis of the gallbladder. *Am J Gastroenterol*. 1985;**80**:274–8.
- 4 Albores-Saavedra J, Murakata L, Krueger JE, Henson DE. Noninvasive and minimally invasive papillary carcinomas of the extrahepatic bile ducts. *Cancer*. 2000;**89**:508–15.