

## Rare Presentation of Hepatocellular Carcinoma Infiltrating Gall Bladder – A Case Report

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**ABSTRACT**

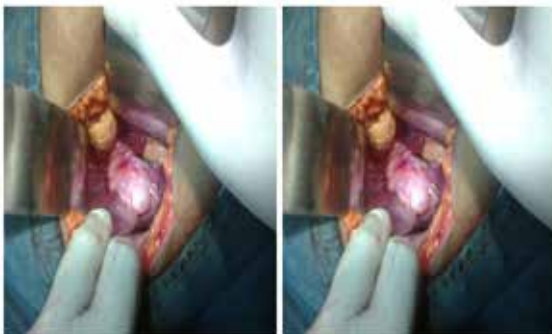
*In our surgical practice it is not very uncommon to find a gall bladder carcinoma in infiltrating adjacent liver parenchyma. Here we are presenting a case where a middle aged female patient while undergoing open cholecystectomy found to have a nodule at the fundus of gall bladder which very much looked like gall bladder carcinoma. On histopathology we found it to be a case of Hepatocellular carcinoma infiltrating Gall bladder.*

**KEYWORDS :** Chronic calculus cholecystitis; Thick walled gall bladder; Infiltrating hepatocellular carcinoma.

**Introduction:**

Hepatocellular carcinoma (HCC) is a rapidly growing tumor associated with a high propensity for vascular invasion and metastasis. The lung, abdominal lymph nodes, and bone are the most common sites of extrahepatic metastatic HCC. Most extrahepatic HCC occurs in patients with advanced intrahepatic tumor stage. Here we present a case of Hepatocellular carcinoma infiltrating Gall bladder.

**Case report:** A 45 year old female presented to us with features of flatulent dyspepsia with right upper abdominal pain. Patient was afebrile, with no history of anorexia or weight loss. On examination patient was mildly anemic but not jaundiced. USG abdomen showed chronic calculus cholecystitis with single large gall bladder stone and mildly thickened gallbladder wall. Liver function tests were normal with hemoglobin 9.8 gram/dl. Patient was taken for open cholecystectomy. On exploration we found single gall bladder stone with a hard nodule at the fundus of gall bladder highly suggestive of gall bladder carcinoma. We excised a small portion of liver around the gall bladder fossa along with gall bladder and sent for histopathology examination.

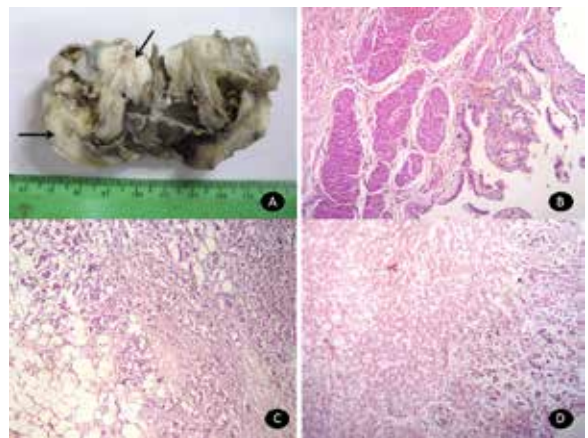
**Figures showing gall bladder with hard nodule at fundus****Histopathology:****Gross:**

Specimen of gall bladder measures 5x3x1.7cm. Cut section- mucosa is ulcerated and contains multiple stones. Two pale white fleshy nodules were noted- one at the fundus and the other at the body. Resected surgical margin at the neck is grossly free.

**Microscopy:**

Multiple sections at different parts of the gall bladder show focally ul-

cerated surface lining epithelium with chronic inflammatory infiltrate into the lamina propria and fibrotic muscularis. In addition, the serosa as well as muscularis is markedly expanded to accommodate multiple tumour nodules. The tumour is arranged in the form of trabeculae, which are surrounded by transgressing capillaries. Tumour cells are moderate to markedly pleomorphic, have coarse nuclear chromatin, prominent nucleoli and abundant amount of finely granular eosinophilic cytoplasm with intracytoplasmic bile pigments. Few multinucleated tumour giant cells are also noted. Adjacent liver parenchyma shows few dysplastic nodules as well as fatty change. Overall features are of moderately differentiated hepatocellular carcinoma.

**Legends:**

- (A) Gross examination of cut open gall bladder with multiple pale white nodules within the wall (arrow); lumen contains stones. (B) Gall bladder shows chronic cholecystitis [H&E, 10X]. (C) Tumour infiltrating into the gall bladder wall and adjacent fat [H&E, 10X]. (D) Interface between adjacent liver bed showing fatty change and tumour mass [H&E, 10X].

**Diagnosis:** Chronic calculus cholecystitis.

Infiltration by moderately differentiated hepatocellular carcinoma.

**Discussion:**

Hepatocellular carcinoma (HCC) is one of the most common cancers worldwide, with the highest incidence in regions with high prevalence of chronic viral hepatitis infection, especially hepatitis B infec-

tion. HCC commonly metastasises to lungs, lymph nodes, adrenal gland and bones, including the skull. The overall prognosis of patients with metastatic HCC is poor.(1)

It is well known that HCC sometimes invades the biliary system. Since there is no peritoneum between the gallbladder and the liver fossa, a gallbladder cancer easily invades the liver; however, HCC seldom invades the gallbladder because it rarely destroys the muscle layer or the collagen fibers of the gallbladder wall. Routes of gallbladder metastasis of HCC include direct invasion, extension to the biliary system, and invasion of the adjacent hepatic vascular system. Some cases of gallbladder metastasis of HCC without direct invasion have been reported (2).

A metastatic tumor of the gallbladder is rare. An autopsy series represented the incidence of metastatic tumor of the gallbladder in 1000 cases to be 5.8% (3). The most common primary carcinoma leading to a metastatic tumor of the gallbladder is malignant melanoma. Das Gupta and Brasfield found a 15% incidence of gallbladder metastasis in patients dying from malignant melanoma (4).

A preoperative diagnosis of metastatic HCC to the gallbladder is difficult. Although imaging may show wall thickening or tumorous lesions of the gallbladder in some cases, there are no specific findings in the imaging tests of metastatic HCC to the gallbladder (5,6).

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