



ORIGINAL RESEARCH PAPER

Surgery

CASE OF SYNCHRONOUS HEPATOBILIARY TUMOUR; DIAGNOSTIC DILEMMA

KEY WORDS: synchronous biliary tumours, gall bladder carcinoma, periampullary tumour

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BACKGROUND

Synchronous biliary tract tumours are very rare. Synchronous double cancers of the extrahepatic bile duct with-out abnormal pancreatobiliary junction are extremely rare, and to date only 4 cases have been reported in the English literature [1-3]. Until now less than 10 cases have been reported all over the world. Usually, the coexistence is attributed to abnormal pancreatobiliary junction [4-6], local spread or metastasis or de novo. In cases apart from anomalous pancreatobiliary junction, p53 mutations have been associated with simultaneous cancers. Contrast enhanced tomography is done as the initial investigation and FDG-PET is increasingly being used in the staging work up. When there is a suspicion of periampullary growth on cross sectional imaging, side viewing scopy is done to evaluate the lesion and take biopsies. The case presented here is interesting as PET showed metabolically active lesions in the the gall bladder and periampullary region, the latter being subtle on endoscopy.

Case Presentation

A woman in her early fifties presented with complaints of right upper abdominal discomfort along with weight loss and anorexia for three months. There were no constitutional symptoms and no history of jaundice or pruritus. Clinically she was anicteric and well preserved with a good performance status. A vague mass was palpable in the right upper quadrant, commensurate with gall bladder malignancy.

Investigations

Ultrasonography abdomen showed Irregular GB wall thickening with a mass lesion at the fundus of the gall bladder with loss of interface with liver, suggestive of malignant growth of the gall bladder. Liver function tests showed normal bilirubin levels with raised transaminases and alkaline phosphatase- 533u/l. CA 19-9 20.25 u/l and carcinoma embryogenic antigen levels were 2.25 u/l. Contrast enhanced computed tomography was suggestive of gall bladder malignancy with dilated bile duct with terminal CBD showing sludge/organized sludge/mass with minimal intrahepatic biliary radical dilatation.

PET CT showed a dual malignancy in gall bladder as well as periampullary tumour. Side viewing endoscopy showed slightly prominent ampulla with normal mucosa. Endoscopic ultrasound was done which showed a sub-centimetre mass in the ampulla and biopsy was inconclusive. In view of PET findings, she was planned for Hepato pancreato duodenectomy/extended cholec ystectomy with Whipple's after adequate prehabilitation. Intraoperatively gall bladder was contracted with a palpable hard mass in the fundal region. Common bile duct was 1.9cm dilated, pancreatic duct dilated 3 mm with multiple faceted CBD stones.



Figure 1 shows the CT images of the gall bladder tumour and dilated common bile duct with intrahepatic biliary radical dilatation

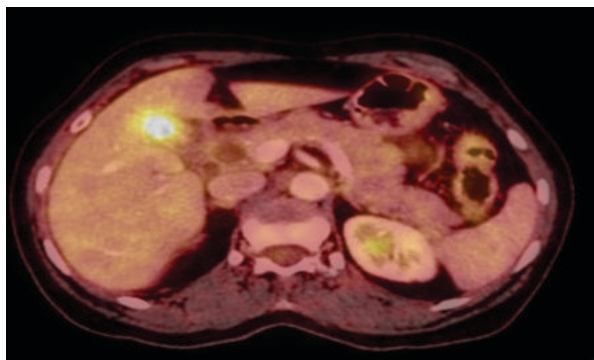


Figure 2 Here we show the PET image of FDG uptake in gall bladder.

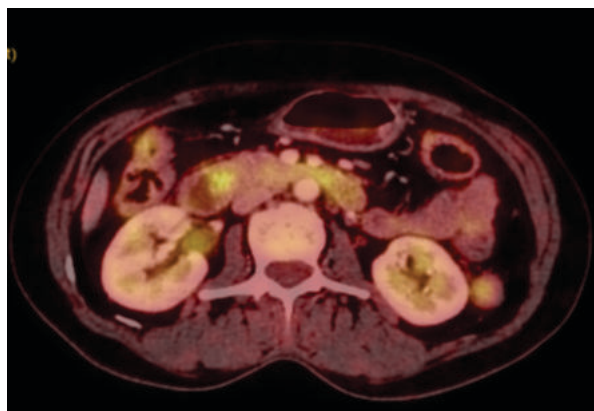


Figure 3 Shows PET showing uptake in the ampullary region

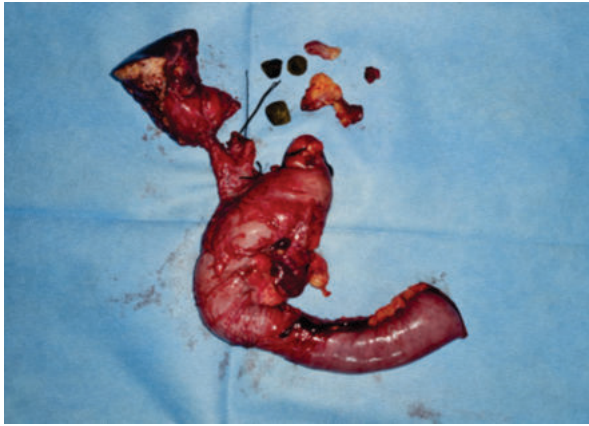


Figure 4. Resected extended cholecystectomy with Whipple's specimen



Figure 5. Resected cut open specimen showing ampullary bulge/tumour.

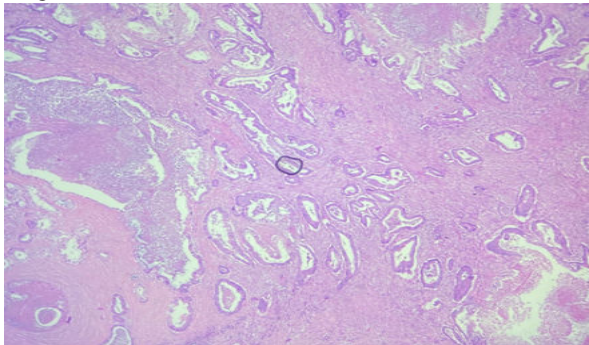


Figure 6 Showing the histopathological findings of the resected Gall bladder moderately differentiated adenocarcinoma with lymphovascular and perineural invasion

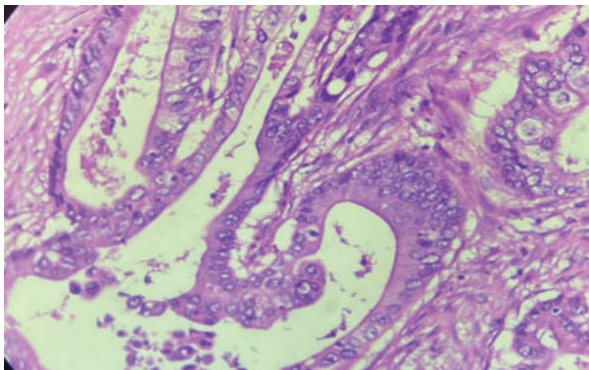


Figure 7 Showing histopathological findings of periampullary tumour showing adenoma with low grade dysplasia

Gall bladder carcinoma, papillary type, metastasis in the distal common bile duct or ampullary region, dual tumours of hepatobiliary tract

Treatment

Extended cholecystectomy with Whipple's after adequate prehabilitation

Outcome And Follow-up

Post-surgery period was uneventful and discharged on the ninth postoperative day. Histopathology of the gall bladder was suggestive of moderately differentiated adenocarcinoma pT2bN1 with lymphovascular and perineural invasion and negative resected margins. The periampullary lesion was reported as adenoma with low grade dysplasia. Patient is currently on chemotherapy at her hometown.

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Differential Diagnosis