(International Print/Online Journal)

SJIF IMPACT FACTOR: 5.565
PUBMED-National Library of Medicine ID-101739732

ISSN (Print): 2209-2870
ISSN (Online): 2209-2862

International Journal of Medical Science and Current Research (IJMSCR)
Available online at: www.ijmscr.com
Volume 4, Issue 4, Page No: 306-309
July-August 2021

IJMSCR

Synchronous Dual Malignancy of Gall Bladder Carcinoma and Ampullary Carcinoma: A Rare Case Report

Dr. Ritu Sharma [1], Dr. Kaalindi Singh [2], Dr. RR Negi [3]
[1] Resident Doctor, [2] Assistant Professor [3] Professor
MD Radiotherapy, Department of Radiotherapy, SLBSMC Mandi

***Corresponding Author:**
Dr. Ritu Sharma
MD Radiotherapy, SLBSMC, Mandi, H.P, India

Type of Publication: Case Report
Conflicts of Interest: Nil

Abstract

Incidence of second malignancy in a patient of known malignant tumor is not uncommon. Presence of synchronous primary malignancies is still unusual. Synchronous malignancies in biliary system is rare. We are presenting a case of dual malignancy of gall bladder carcinoma and ampullary carcinoma of a 59 year old male patient. He presented with signs and symptoms of obstructive jaundice. CT showed cholelithiasis with thickening in GB neck extending to CBD. Slide view endoscopy showed growth in proximal D2 separate from ampulla. Patient underwent explorative laparotomy with hepatopancreaticodudenectomy. Histopatholgy of gall bladder was papillary adenocarcinoma and of ampulla was pancreaticobiliary type adenocarcinoma with different pathological stages. Patient was further treated with adjuvant chemotherapy based on gemcitabine and capecitabine. Patient received adjuvant CCT with normal CA.19-9 level after 4 cycles. In our case we can conclude that patient of biliary dual malignancy can be treated with surgery and adjuvant chemotherapy with good outcome.

Keywords: NIL

INTRODUCTION

Synchronous malignant tumors in biliary tract are rare. Pancreaticobiliary mal-junctions (PJM) are thought to be associated with them. However, some may occur without PJM which may be owing to local spread and metastatis. We present a case of dual malignancy of gall bladder and ampulla presenting at different pathological stage.

CASE REPORT:

A 59-year-old male presented with insidious onset and progressive jaundice associated with generalized pruritus. Patient also had nausea and vomiting and effortless weight loss around 8kg in a month. Patient had no history of fever, clay-colored stools, hematemesis and melena. He was a known case of type II diabetes. On examination there was deep icterus and abdominal examination was normal. Liver function test were deranged with total serum bilirubin 9.5mg/dl and conjugated serum bilirubin 8.8mg/dl, alkaline phosphatase 505IU/dl. Tumor marker CA19-9 was elevated (70U/ml). CECT showed cholelithiasis and thickening in GB neck extending to CBD and distally to involve distal CBD (Fig-1&2). Multiple peri choledochal nodes were present with low insertion of cystic duct. Liver was normal & no retroperitoneal lymph nodes. Ultrasonography also showed cholelithiasis with dilated CBD and hypertrophy of head of pancreas. Slide view endoscopy showed 2cm ulcer proliferative growth in proximal D2, separate from ampulla. Biopsy was taken but was inconclusive showing fragmented duodenal mucosa with inflammatory infiltrate. He underwent PTBD in view

of symptomatic obstructive jaundice with total bilirubin of 10mg/dl. Endocrinology opinion was sought and blood sugars were managed. After adequate pre-operative optimization patient was taken up for surgery.

He underwent explorative laparotomy with intraoperative ultrasound (IOUS) with minor hepatopancreaticodudenectomy. Operative finding revealed gall bladder neck mass infiltrating CBD and a large nodal mass with periportal and retro pancreatic lymph node in peripancreatic region. IOUS showed lymph node mass in peripancreatic region with GB neck mass. He recovered well after surgery and was discharged with biliary stent in situ.

Grossly on histopathology report tumor was involving neck of gall bladder and not infiltrating liver. Cut surface of distal part of CBD showed a tumor at ampulla which was ulcerated and tumor was pushing pancreatic head but not infiltrating it. Microscopy of tumor involving neck of neck of gall bladder showed features of papillary adenocarcinoma of gall bladder with pathological stage IIIB. Perineural invasion was present and tumor infiltrated transmural upto subserosa. Section from tumor involving ampulla showed features of pancreaticobiliary type of adenocarcinoma with pathological stage IIIA. Resected margins were free of tumor, two out of four lymph nodes dissected near gall bladder showed metastasis and 16 nodes dissected from peripancreatic fat were free of tumor.

He was started on adjuvant chemotherapy after metastatic workup, gemcitabine ($1gm/m^2$) and capecitabine (650mg/m2) from National Cancer Institute. Jhajjar. Gemcitabine was delivered on day 1 & 8 and capecitabine from day1 to 14. Cycle repeated after 28 days. Till now patient has received 4 cycles of chemotherapy at our institute. Patient had mild hematological toxicities and hand foot syndrome. His CA 19-9 levels were in normal range and was asymptomatic. He was further planned for 2 more cycles of adjuvant chemo.

DISCUSSION:

There are some case reports on dual primary cancers in GI tract. However, there are very few reported cases of synchronous malignancies involving ampulla of vater. Schlipert et.al reported nine cases of dual malignancies among 57 cases of carcinoma of ampulla of vater [1]. Dual malignancies of biliary tract are thought to be associated with pancreato biliary mal-junction due to the action of same carcinogen on the mucosa of whole extrahepatic biliary tract [2]. In patients without anomalies possibilities can be of independent cancer foci or metastasis of original cancer [3].

Gertsch et al. differentiated between synchronous malignancy versus metastatic spread by applying criteria of no direct continuity between two tumors, growth pattern typical of primary tumor and clear histological difference between two tumors [4].

Gall bladder cancers often present as obstructive jaundice. Presence of obstructive jaundice in patients of carcinoma gall bladder is viewed as an indicator of advanced disease, inoperability and poor prognosis [5]. In such patient's possibility of dual lesion should be kept in mind. If two lesions are operable then patient would benefit from aggressive surgical approach. Radical surgery with lymph node dissection should be done [6].

There are some evidences that suggest that adjuvant chemotherapy should be effective in R0 resected biliary tract carcinomas (BTC). In locally advanced or metastatic (BTC) chemotherapy contained gemcitabine is considered as standard regime [7]. In addition to gemcitabine, oral fluropyrimidines are considered to be the most promising agents with mild toxicity for the treatment of advanced BTC [8]. In our cases patient received 4 cycles of adjuvant chemotherapy with mild hematological toxicities and hand and foot syndrome and persistent low level of tumor marker CA19-9.

CONCLUSION:

Synchronous dual malignancies in biliary tract are rare. Etiology may be anomalies in biliary tract or independent tumor foci or metastasis from original cancer. Complete resection of tumor should be the goal. Patients with R0 resection benefit from adjuvant chemotherapy. Prognosis depends on lymph node extension, metastatic disease, perineural invasion and involvement of cystic duct.

REFERENCES:

1. Schlippert W, Lucke D, Anuras S, Christensen J. Carcinoma of the papilla of Vater. Am J

Volume 4, Issue 4; July-August 2021; Page No 306-309

Surg. 1978;135:763–70. [Abstract] [Google Scholar]

2. Ikoma A., Nakamura N., Miyazaki T., Maeda M. Double cancer of the gallbladder and common bile duct associated with anomalous junction of pancreaticobiliary ductal system. Surgery. 1992;111:595–600. [Abstract] [Google Scholar]
3. Hori H., Ajiki T., Fujita T. Double cancer of gall bladder and bile duct not associated witanomalous junction of the pancreaticobiliary duct system. Jpn J Clin Oncol. 2006;36(October (10)):638–642. [Abstract] [Google Scholar]
4. Gertsch P., Thomas P., Baer H., Lerut J., Zimmermann A., Blumgart L.H. Multiple tumors of the biliary tract. Am J Surg. 1990;159:386–388. [Abstract] [Google Scholar]
5. Hawkins W.G., DeMatteo R.P., Jarnagin W.R., Ben-Porat L., Blumgart L.H., Fong Y. Jaundice predicts advanced disease and early mortality in patients with gallbladder cancer. Ann Surg Oncol. 2004;11(March (3)):310–315. [Abstract] [Google Scholar]
6. Agarwal A.K., Mandal S., Singh S., Bhojwani R., Sakhuja P., Uppal R. Biliary obstruction in gall bladder cancer is not sine qua non of inoperability. Ann Surg Oncol. 2007;14(October (10)):2831–2837. [Abstract] [Google Scholar]
7. Yamanaka K, Hatano E, Kanai M, et al. A single-center analysis of the survival benefits of adjuvant gemcitabine chemotherapy for biliary tract cancer. Int J Clin Oncol 2014;19:485–9. [PubMed] [Google Scholar]
8. Takashi S, Hiroyuki I, Yousuke N, et al. Current status of chemotherapy for the treatment of advanced biliary tract cancer. Korean J Intern Med 2013;28:515–24. [PMC free article] [PubMed] [Google Scholar]

FIGURE LEGENDS:

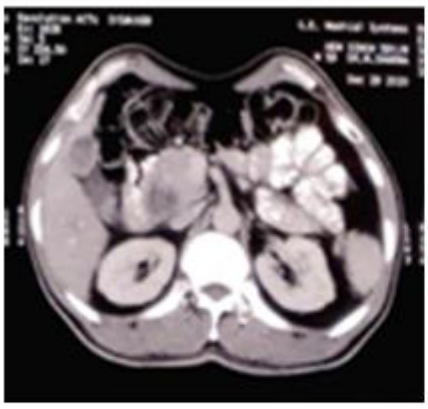

Fig-1 CT image showing ill-defined mass In relation to D2 with thickening of neck of gall bladder

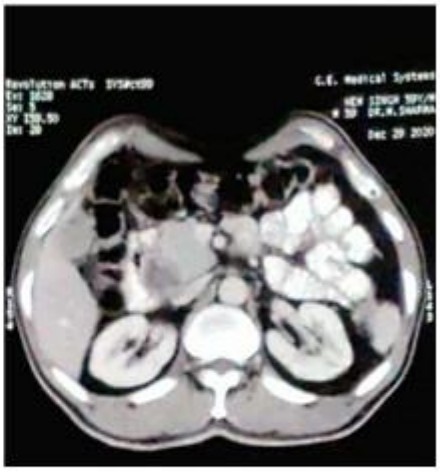

Fig-2: CT image showing ill-defined mass along lateral aspect of D2 with marked dilation of CBD

Volume 4, Issue 4; July-August 2021; Page No 306-309

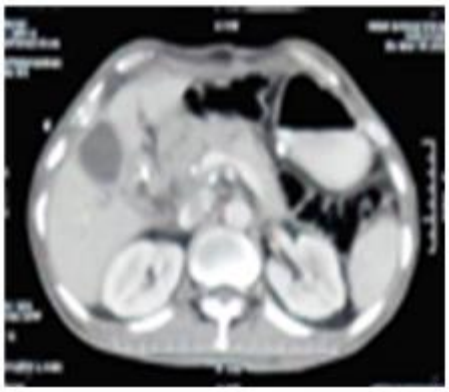

Fig-3: Post-op CT image

Volume 4, Issue 4; July-August 2021; Page No 306-309