Case Report

Carcinoma transverse colon masquerading as carcinoma gall bladder

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Abstract: Colorectal cancer is one of the most common cancer worldwide .Its incidence is reported to be increasing in developing countries. It commonly presents with weight loss, anaemia, lump abdomen, change of bowel habit, obstruction or fresh rectal bleeding. Beside these common modes of presentations, there are some rare manifestations which masqueraded as different disease like obstructive jaundice, empyema gall bladder or cholecystitis. A 60-year-old male presented to hospital with right sided pain abdomen. On abdominal examination mild tenderness was present in right hypochondrium. Intra operatively gall bladder was separated from the adjoining gut, peritoneum and liver bed and was removed. On further exploration, there was a large mass in the vicinity of the gall bladder related to transverse colon. Extended right hemicolectomy was done. Histopathological examination of gut mass revealed adenocarcinoma of transverse colon with free margins and gall bladder showed cholecystitis with no evidence of malignancy. We present an interesting case of colon cancer colon that caused diagnostic confusion by mimicking as cholecystitis. Colorectal cancer constitutes a major public health issue globally. Therefore, public awareness, screening of high-risk populations, early diagnosis and effective treatment and follow-up will help to reduce its occurance and further complications.

Keywords: Cholecystitis; colon cancer; transverse colon; cholecystectomy; chemotherapy

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Introduction

Colorectal cancer is one of the most common cancer worldwide .Its incidence is reported to be increasing in developing countries, probably due to the acquisition of a western lifestyle. The highest rate of incidence of colorectal malignancy occurs more commonly in developed countries like North America, Western Europe with usual mode of presentations like weight loss, anaemia, lump abdomen for right side and tenesmus, change of bowel habit, obstruction, fresh rectal bleeding for left side. Beside these common modes of presentations, there are some manifestations which masqueraded as different disease like obstructive jaundice, empyema gall bladder or cholecystitis.

Here we present a case of carcinoma of proximal part of transverse colon that caused diagnostic confusion by mimicking as gall bladder cancer.

Case report

A 60-year-old male presented to hospital with one year history of right sided pain abdomen, associated with upper GI symptoms like nausea, vomiting. There was no history of weight loss, GI obstruction or blood in stool. Clinical examination revealed pallor. On abdominal examination mild tenderness was present in right hypochondrium. A palpable mass of about 3-4 cm present in right upper quadrant with rounded lower margins, moving with respiration and continuous with liver dullness. Routine investigations showed Hb 7 g/mL. TLC, DLC, RFT, PTI and LFT were within normal limit. Bone marrow examination done for persistant anemia despite of blood transfusion showed iron deficiency anaemia. Ultrasound abdomen showed thickened gall bladder wall with polyp suggestive of malignancy however magnetic resonance

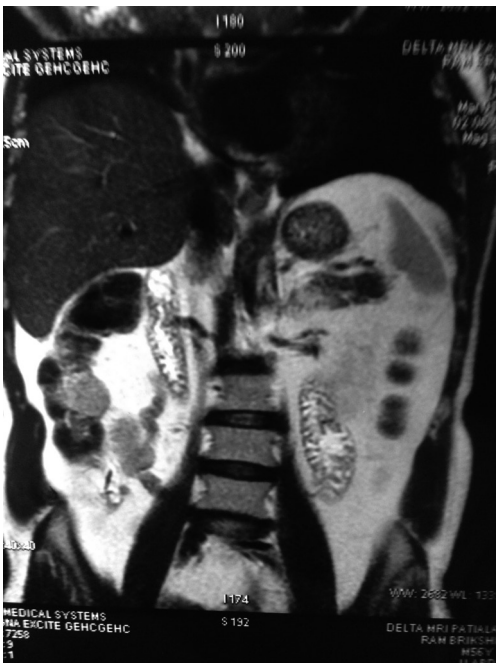

Figure 1 Magnetic resonance cholangiopancreatography (MRCP) showing features of cholecystitis with small polyp.

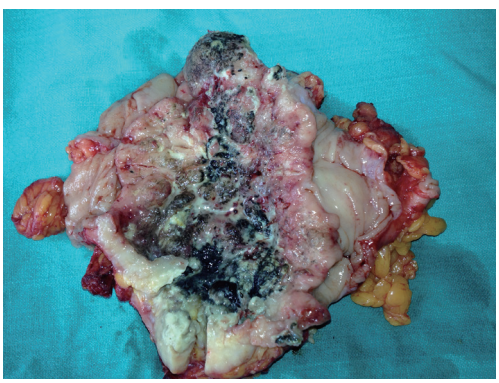

Figure 2 Cut section of excised transverse colon tumor.

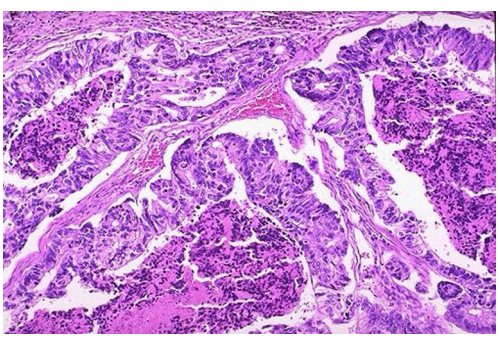

Figure 3 Histopathological examination (H and E stain) of colon cancer showing tumor cells (Magnification 20×).

cholangiopancreatography (MRCP) revealed cholecystitis with one small polyp as the only findings (*Figure 1*). Laparoscopic cholecystectomy was attempted. Intra operatively, gall bladder was adherent to liver bed, adjoining gut and omentum. There was difficulty separating gall bladder from adjoining structures for which the procedure was converted to open cholecystectomy. Gall bladder was separated from the adjoining gut, peritoneum and liver bed. On further exploration, there was a large mass in the vicinity of the gall bladder related to transverse colon. Extended right hemicolectomy along with cholecystectomy was performed. Histopathological examination of gut mass revealed adenocarcinoma of transverse colon with free margins (*Figures 2,3*). Lymph nodes showed reactive pathology. Histopathological examination of Gall bladder showed cholecystitis. Patient recovered well postoperatively without any complications and was planned for chemotherapy.

Discussion

Colorectal cancer is one of the most common cancer worldwide and its incidence is reported to be rising in developing countries, probably due to the acquisition of a western lifestyle. Colorectal cancer constitutes a major public health issue globally with an estimated 1.2 million new cancer cases and over 630,000 cancer deaths per year, almost 8% of all cancer deaths (1,2). Globally it is the fourth most common cancer in male and the third most common in female (2). A patient with right sided colon tumor usually presents with iron deficiency anaemia, weight loss, cachexia, palpable mass and positive faecal occult blood unlike cancer from left side which causes change of bowel habit, tenesmus, fresh rectal bleeding and obstruction (3). We present a rare case of proximal transverse colon carcinoma presenting as carcinoma gall bladder. Literature also support to report a case of transverse colon cancer manifesting with signs suggestive of acute cholecystitis (4). In approximately 10% of patients, the tumor mass is usually adherent to adjacent structures (5). Structures superior to the transverse colon are less commonly involved by direct spread of colonic tumors. The stomach, spleen and duodenum were most frequently invaded followed by diaphragm, abdominal wall, pancreas and liver (5,6). It has been shown that patients with a history of gallstone disease who subsequently had a cholecystectomy are at an increased of colorectal malignancies (7,8). The percentage of metastatic tumours in the upper gastrointestinal tract among patients with upper

gastrointestinal bleeding is reported to be around 0.06% (9).

Chen *et al.* (4) reported a case of transverse colon cancer manifesting with signs suggestive of acute cholecystitis and suggested that invasion of gall bladder resulted in an inflammatory adhesion which subsequently resulted in an acute acalculous cholecystitis while Nair MS *et al.* (10) suggested that gall bladder empyema with colonic carcinoma most likely occurred as a result of penetration of the gallbladder wall with possible fistulation and subsequent colonic perforation and abscess formation within the gallbladder. The difference between our case and that of above mention case is that our patient had features of cholecystitis—thickened gall bladder wall with gallbladder polyp on USG suggestive of malignancy and MRCP showed cholecystitis with gall bladder polyp. Our patient also had anaemia which was refractory to blood transfusion however his bone marrow examination showed iron deficiency anaemia while his fecal occult blood test was negative. It was proposed that local spread of inflammation of transverse colon to biliary organs like gallbladder resulting in an acute inflammatory process which subsequently resulted in an acute acalculous cholecystitis mimicking gall bladder carcinoma.

Conclusions

We present an interesting case of colon cancer colon that caused diagnostic confusion by mimicking as carcinoma gall bladder. Colorectal cancer constitutes a major public health issue globally. Lack of awareness of the disease, lack of diagnostic facilities, lack of screening programs, poor accessibility to healthcare facilities and adjuvant therapy, the high cost of care, high morbidity and mortality are among the trademarks of the disease lead to its great challenge in the management of these patients. Therefore, public awareness, screening of high-risk populations, early diagnosis and effective cost-effective treatment and follow-up will help to reduce its occurance and further complications.

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