Gall Bladder Cancer Masquerading as Anterior Abdomen Wall Abscess

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ABSTRACT

Biliary fistulas can be internal or external. Most internal fistulas occur due to inflammatory diseases affecting the biliary tree whereas external fistulas mostly occur after surgery involving the biliary system. Gall bladder cancer presenting with cholecysto-cutaneous fistula is an extremely rare finding. We hereby report a case of a 62-year-old female who presented with a spontaneous cholecysto-cutaneous fistula from an underlying gall bladder cancer.

Keywords: Biliary fistula; Gall bladder cancer; Cholecysto-cutaneous fistula

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INTRODUCTION

Gall bladder cancer is an aggressive malignancy associated with a dismal outcome. About 60-70% patients present with locally advanced/metastatic disease and the median survival of this disease is <6 months [1]. Gall bladder cancer presenting as cholecysto-cutaneous fistula is an extremely rare finding. In the past 50 years, only 16 cases of spontaneous cholecysto-cutaneous fistula have been reported in the medical literature [2]. We hereby report a case of spontaneous cholecysto-cutaneous fistula as a presenting feature of an underlying gall bladder malignancy.

CASE REPORT

A 62-year-old female presented to the surgical emergency with complaints of jaundice, right upper abdominal pain and a foul smelling discharge from an opening situated on the right side of the anterior abdominal wall. Clinical examination revealed deep icterus, an abscess exuding foul discharge from the right upper abdominal wall with surrounding skin induration, an underlying palpable abdominal lump and presence of free fluid in the abdominal cavity. Liver function tests revealed elevated total (18 mg/dl) and direct (15 mg/dl) bilirubin and an elevated serum alkaline phosphatase (2146 U/L). Serum transaminases were normal. Abdominal ultrasound showed intra-hepatic biliary dilatation, mural thickening of the gall bladder along with the presence of a gall bladder mass of 4.8 x 4.2 cm with periportal lymphadenopathy and free fluid in abdominal cavity. Abdominal computed tomography (CT) scan revealed gall bladder mass with infiltration into the overlying abdominal wall along with multiple periportal and peripancreatic lymph nodes and ascites. Based on these clinical and radiological findings, a provisional diagnosis of stage IV gall bladder cancer was made. Adenocarcinoma gall bladder was confirmed on the histopathological examination of the biopsy taken from the wall of the abscess cavity.

DISCUSSION

Biliary fistulas can be classified as either internal/external or spontaneous/iatrogenic. Internal biliary fistulas are commoner than external biliary fistulas. Internal biliary fistulas can occur due to acute cholecystitis, peptic ulcer, hydatid cyst and amebic/pyogenic liver abscess. About 75% internal fistulas connect with duodenum and about 15% connect with colon [3]. External biliary fistulas are usually iatrogenic. They can develop following cholecystectomy, chlolecystostomy, choledochotomy, biliary-enteric anastomosis, drainage of abdominal collections, endoscopic sphincterotomy and interventional radiology procedures. Spontaneous external biliary fistula was first described by Thilesius in 1670 [4]. In 1890, Courvoisier described 169 cases of biliary fistulae [4]. After these initial reports, Naunyn reported 184 cases in 1896 and Bennet reported 122 cases in 1897 [4]. Spontaneous cholecysto-cutaneous fistulae are rarely seen nowadays due to early diagnosis of biliary disorders using ultrasound scans and safe management of biliary tract disorders. Only 16 cases of spontaneous

Figure 1: Patient with anterior abdominal wall abscess discharging pus

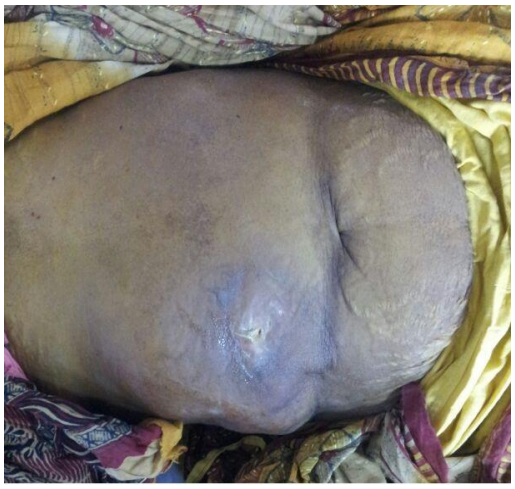
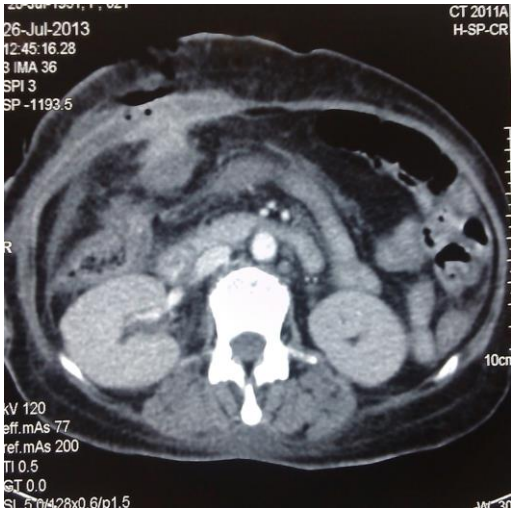


Figure 2: CECT showing gall bladder adhered to the anterior abdominal wall and the abscess cavity



cholecysto-cutaneous fistula have been reported in the past 50 years [2]. Most of such fistulae are seen due to neglected biliary tract disease. The most common site of the external opening of a spontaneous cholecysto-cutaneous fistula is the right hypochondrium [5]. Besides right hypochondrium, the external opening of a cholecysto-cutaneous fistula can be located in the left hypochondrium, umbilicus, right lumbar region, right iliac fossa or back [5]. The differential diagnosis of such an opening includes pyogenic granuloma, infected epidermal inclusion cyst or metastatic carcinoma [6]. The discharge from the fistulous opening can be bilious, purulent, mucoid or serous depending upon the underlying disease and ductal patency [7].

Gall bladder cancer is an aggressive malignancy associated with a poor prognosis. The clinical pessimism surrounding gallbladder cancer is because of its late presentation and lack of effective therapy. One of the highest incidence rates of gall bladder cancer is seen in North India [8]. Females are affected more than males. The disease is often recognized after histopathological examination of the gall bladder specimen following cholecystectomy. Unfortunately, this operation is incomplete except for the earliest stage of disease. Early disease is often asymptomatic or has symptoms like abdominal discomfort, nausea and anorexia. These symptoms are often confused with cholelithiasis. Advanced disease presents with weight loss, obstructive jaundice, duodenal obstruction, palpable abdominal mass, hepatomegaly and ascites. Patients older than 70 years with a history of recent weight loss and persistent right upper quadrant pain should be suspected of having gallbladder cancer. Gall bladder cancer has a tendency to spread early through the lymphatic and hematogenous route and also by direct infiltration into the liver [9]. Besides this, literature also mentions the propensity of gall bladder cancer to seed and grow in the peritoneal cavity, as well as along the biopsy and laparoscopic port sites [9]. Cutaneous fistulization is, however, extremely rare. Stage IV gall bladder cancer is considered unresectable. Chemotherapy regimens including agents such as gemcitabine and oxaliplatin have been used for palliation of symptoms in unresectable disease with some survival benefit [10]. The overall outcome of the disease is dismal with 5 year survival rates being <5% [11].

CONCLUSION

Spontaneous cutaneous fistulization in a case of gall bladder cancer is extremely rare, and it may be inferred from this case that the disease is fairly advanced by the time it occurs.

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