

Primary squamous cell carcinoma of the gallbladder: a rare entity

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ABSTRACT

Gallbladder carcinoma is a relatively uncommon cancer and adenocarcinomas make up for most common histological type. Squamous cell carcinoma (SCC) variant is considered uncommon and accounts for 0.3-1% of cases. We report a case of primary SCC of in an elderly lady whose only risk factor was gallstones. She presented with increasing abdominal discomfort that was associated with nausea and vomiting. Imaging revealed the tumour to have infiltrated the abdominal wall and right hepatic flexure of the colon. The patient died within two months of diagnosis.

Keywords: Gallbladder neoplasm, squamous cell carcinoma, cholelithiasis, gallstones disease

INTRODUCTION

Gallbladder carcinoma is a relatively uncommon cancer. It is particularly common in central and south America, central and Eastern Europe, Japan and northern India. It is common in certain ethnic groups such as the Native American Indians and Hispanics.¹ Adenocarcinomas make up for most common histological type of gallbladder cancer at about 85-95% with incidence of pure squamous cell carcinoma (SCC) of gallbladder quoted to be rare at 0.3-1%.²⁻⁴ We report a case of primary SCC in an elderly lady whose only risk factor was gallstones.

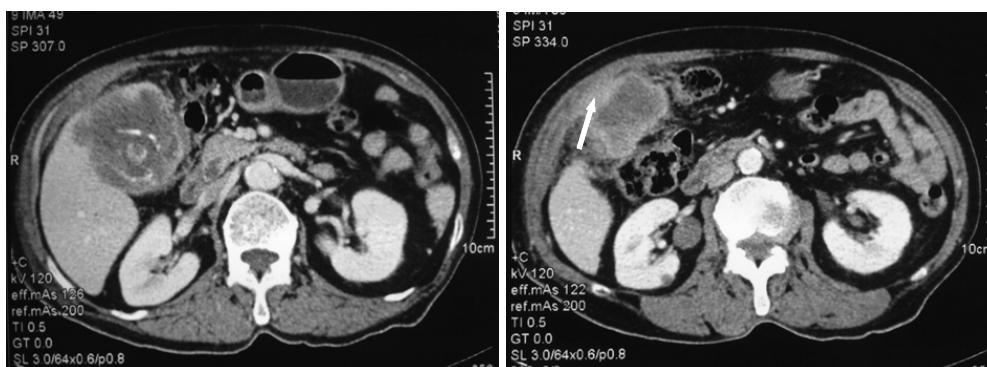
CASE REPORT

An 88-year-old Chinese lady was referred by

the general practitioner with a short history of increasing abdominal discomfort and distension. She was previously well and independent with no notable surgical or medical history or any family history of cancer. She previously had any ultrasound scan many years ago which showed gallbladder sludge, but this was not causing any symptoms. She did not smoke or take any alcohol.

Her initial presenting complaint was increasing right upper quadrant discomfort that was associated with occasional nausea and vomiting. She denied any other symptoms such as dysphagia, dyspepsia, or warning symptoms such as altered bowel habit, weight loss, anorexia, blood loss or bleeding (melaena or bleeding per rectum). On examination, she had a large and firm right upper quadrant mass. Apart from this, there were

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Figs. 1: a) An axial computed tomography image showing thickened irregular wall of the gallbladder with rim and round calcifications (gallstone) and, b) infiltration of the tumour to the abdominal wall (arrow).

were no other findings such as lymphadenopathy or abnormality on examination of the rest of the systems. There were no other abnormal skin lesions noted.

Blood investigations revealed mild normocytic anaemia (Hb 10.8 gm/dL, normal range 12.5 to 16.3) and mildly elevated serum alkaline phosphatase (ALP, 188 U/mL, normal range 40-150). The rest of the liver profiles were normal. Tumour markers which included Carcinoembrogenic antigen (CEA), alpha fetoprotein (AFP) and Carbohydrate antigen (CA) 19-9 done in the outpatient clinic were all normal. Ultrasound scan of the abdomen revealed a large hypoechoic mass with calcification in the location of the gallbladder. A computed tomography (CT) scan confirmed the mass to be gallbladder in origin measuring 8.8 cm with generalised thickening and infiltration of the abdominal wall (Figure 1a and b) and hepatic flexure. A large gallstone was seen and the common bile duct was also dilated at 11 mm. CT scan of the chest and pelvis did not show any other lesion or abnormality. A biopsy of the gallbladder mass revealed it to be a SCC of

the gallbladder. A careful examination of the patient did not show any skin abnormality and a diagnosis of primary SCC of the gallbladder was made.

The patient was referred to the oncology service. In view of her age and the patient age and request, surgery were not offered. Chemotherapy was also not considered as it was felt that it would not be beneficial. The patient was treated symptomatically and died several weeks after diagnosis.

DISCUSSION

SCC of the gallbladder is rare compared to the adenocarcinoma variant. Taking into account of the other variants, squamous differentiation and adenosquamous types, the incidence range from 0% to 12.7% based on what have been reported in the literature.¹⁻³ Roa *et al.* reported that pure SCC accounted for 1% and those with squamous differentiation accounted for 7% in their patients with gallbladder cancers.¹ In our case, we cannot be certain whether our patient had the pure SCC or the variant form as there was no gross specimen to be examined.

Most of the reported cases of SCC gallbladder are either in the advanced or in the early stages that were detected incidentally. Most patients in the early stages did not have any specific symptoms and often the symptoms were relatable to their gallstones or other gastrointestinal symptoms. Takashi *et al.* reported a case of a minute lesion, histologically confirmed to be pure SCC gallbladder following elective cholecystectomy for uncomplicated cholecystitis. The authors reported no evidence of preexisting squamous metaplasia or squamous differentiation of pre-existing adenocarcinoma. In the advanced cases, most reported cases had large lesions or infiltrations into the adjacent structures or had metastases. Rai *et al.* reported a case of localised hepatic infiltration from a well differentiated SCC of gallbladder in a patient who presented with pyoperitoneum with ileus.⁴

The predicted natural history of pure SCC of the gallbladder is characterised by a well localised growth, no visceral metastasis and low lymph node metastasis.² However, this is not the case for those with squamous differentiation either from pre-existing squamous or adenocarcinoma.^{1, 3, 4} Carcinomas with squamous differentiation are reported to be as aggressive as the adenocarcinomas

type.¹ This aggressive behaviour accounts for the frequent findings of involvement adjacent organs (locally advanced disease). Similar to the adenocarcinoma type, despite the presence of local and regional infiltrations, lymph node metastasis and peritoneal seeding are rarely encountered in the SCC type.^{1, 4}

The overall prognosis of gallbladder SCC is poor with an overall median survival of SCC of the gallbladder is only five months. Therefore early diagnosis is important.

In conclusion, our case highlight an uncommon type of gallbladder carcinoma that is associated with a poor prognosis.

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