

Carcinoma Of Gallbladder Neck: A Rare Case Report

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Abstract: Incidence of gallbladder carcinoma is a relatively rare. We present a case of 30 years female who presented to our hospital with pain in the right hypochondrium since 6 months and yellowish discolouration of eyes since 15 days. On magnetic resonance cholangiopancreatography (MRCP) it was found that, there was a mass measuring 33X26 mm in the region of neck the gallbladder. Subsequently, exploratory laparotomy was done and gallbladder mass along with liver bed with proximal common bile duct (CBD) was surgically removed and Roux-en-Y hepaticojejunostomy was done. Histopathologically the case was diagnosed as high grade squamous cell carcinoma of neck of gallbladder.

I. INTRODUCTION

Gall bladder carcinoma is the fifth most frequent gastrointestinal malignancy and the most common tumour of the biliary tract. Still it is relatively rare disease. Higher incidence rates occur among population in South American countries like Chile, Ecuador and Bolivia as well as some areas of India, Pakistan, Korea and Japan. Incidence increases with age and is more common in women six times than men. Ratio being about 2/3:1 in women as to men.

Chronic inflammation associated with gallstones is the best characterized risk factor for development of gallbladder cancer. About eighty percent of primary gallbladder cancers are adenocarcinomas. Small cell cancer, squamous cell carcinoma, lymphoma and sarcoma are other histological types. The management of such patients constitutes a surgical challenge. Depending on disease stage, extent of surgical resections are planned and adjuvant chemoradiotherapy is administered. This report describes the case of 30 years old female of Squamous cell gallbladder carcinoma which was successfully managed.

CASE REPORT

A 30-year-old female patient, presented to the surgical department in DVVPF's Medical college and Hospital with pain in the right hypochondrium since 6 months which was insidious in onset, gradually progressive, dull aching. Yellowish discolouration of eyes since 15 days associated with pruritis, steatorrhoea and significant loss of weight. There was no history of fever, nausea, vomiting, haematemesis and malena. On general examination, there was presence of icterus. On examination, there was a 5x4 cm, non-tender, non-pulsatile globular mass in the right hypochondrium which was hard in consistency with well defined margins and smooth surface with restricted mobility. The examination of rest of the abdomen, flanks, back and hernia orifices was normal. Routine investigations revealed deranged liver function tests (Table1).

| Test done | Observed value | Units |
|------------------------|----------------|---------|
| Serum total bilirubin | 18.3 | mg./dl. |
| Serum direct bilirubin | 16.3 | mg./dl |
| Serum Aspartate | 130.3 | IU/L |

| | | |
|----------------------------|--------------|------|
| transaminase | | |
| Serum Alanine transaminase | 100.4 | IU/L |
| Serum Alkaline phosphatase | 444.9 | IU/L |

Table 1

Ultrasonography revealed a solid homogenously hypoechoic mass lesion measuring 30x28x23 mm in the neck & body of gallbladder with distended rest of gallbladder lumen. Magnetic resonance cholangiopancreatography (MRCP) revealed a mass measuring 33x26 mm in the region of neck of gall bladder (Fig.1). A diagnosis of carcinoma gallbladder was made and patient was taken up for surgery. Abdominal cavity was opened with Rooftop (Chevron) incision. Evidence of enlarged gallbladder (GB) with growth in the hepaticocystic triangle encroaching upon the common bile duct (CBD), portal vein and hepatic artery was revealed (Fig.2) It was difficult to identify and separate cystic artery, cystic duct, hepatic ducts and their confluence due to engulfment of all these structures by the mass. Mobilization of GB mass was done from lateral to medial side in hepatoduodenal ligament (Fig.3,4). Common hepatic artery was identified and dissected away from the growth. Portal vein and common bile duct at supraduodenal area was identified and dissection was continued proximally around porta hepatis. As mass extended into hepatic parenchyma resection was done. A Roux-en-Y limb of jejunum was used to create hepaticojejunostomy (Fig.5). For further external beam radiotherapy treatment, cancerous area was marked with liga clips. Drain was kept in subhepatic region and abdomen was closed. The immediate postoperative was uneventful. Oral feeds were started on sixth postoperative day. Drain was removed after 14 days. The patient recovered satisfactorily and was discharged after removal of skin sutures on 15th postoperative day. Histopathology revealed tumour composed of groups, cords, sheets and cell nests of moderately differentiated squamous cells suggestive of high grade squamous cell carcinoma of neck of gallbladder invading the wall of CBD with subtotal luminal obliteration (Fig.6,7). Postoperative liver function tests showed improvement towards normal (Table 2).

| Test done | Observed value | Units |
|------------------------------|----------------|---------|
| Serum total bilirubin | 4.6 | mg./dl. |
| Serum direct bilirubin | 2.2 | mg./dl. |
| Serum Aspartate transaminase | 80.6 | IU/L |
| Serum Alanine transaminase | 68.4 | IU/L |
| Serum Alkaline phosphatase | 202.3 | IU/L |

Table 2

During the follow-up visit after one month, the operative scar was found to be well healed and the patient was absolutely asymptomatic. No recurrence during last 1 year of follow up.

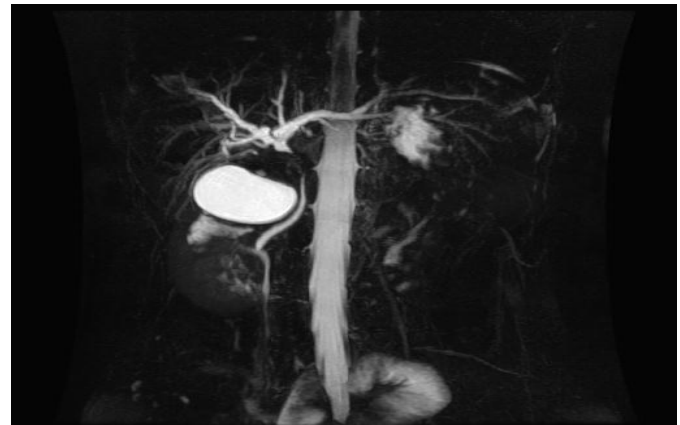


Figure 1: MRCP revealing mass in the neck of gallbladder



Figure 2: Enlarged gallbladder with peripheral adhesions



Figure 3: Dissection of gallbladder mass in progress



Figure 4: Gallbladder mass with proximal common bile duct

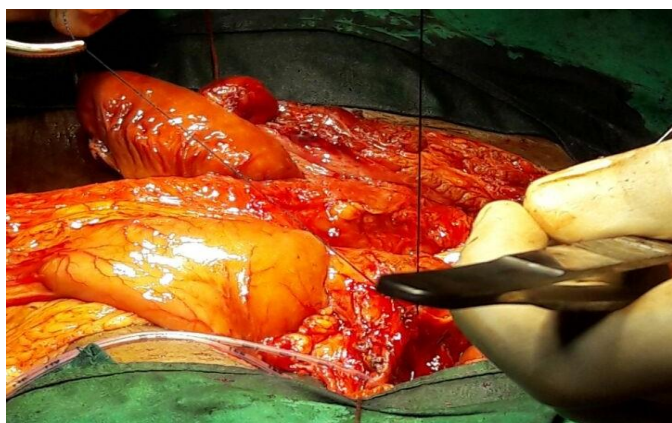


Figure 5: Roux-en-Y anastomosis



Figure 6: Gross GB mass specimen

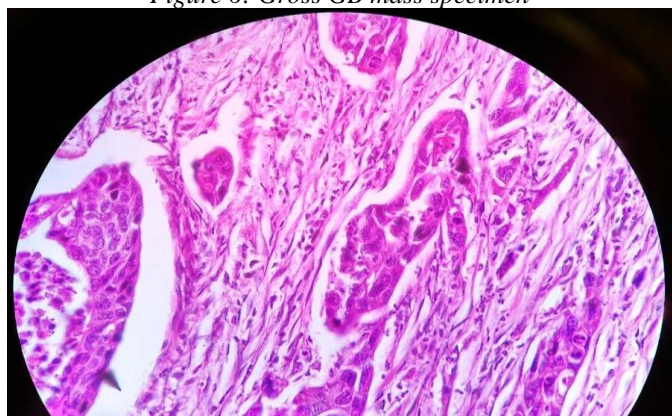


Figure 7: High grade squamous cell carcinoma of gallbladder

II. DISCUSSION

Gallbladder carcinoma is common in Indian subcontinent but relatively uncommon in western world. Being a disease of elderly with a peak incidence of around 70-80 years, it is common in females. In our case patient was 30 years old female who presented with pain in the right hypochondrium. In a study done by Nevra Dursun et al. found that mean age of presentation was 65 years. At early stages gallbladder carcinomas are asymptomatic. Most common symptom mistaken for biliary colic or chronic cholecystitis is right hypochondrium pain. Other nonspecific presentations include anorexia, indigestion of food, weight loss and upper abdominal discomfort. In our case patient was symptomatic at an early stage with globular mass being palpable in the right hypochondrium.

The most common histological type of gallbladder carcinoma is adenocarcinoma which is well described in the literature. However, squamous carcinomas are rare and thus literature is less and sometimes diverse.

Squamous cell carcinoma of gallbladder is rare and represents only 12.7% of all cases of carcinoma gallbladder. Pure squamous cell carcinoma is even more rare with incidence of 3.3%. It usually presents with an ill defined clinical course and is detected in an advanced stage because of its tendency to infiltrate adjacent organs and spread silently. In our case, young patient presented with features of obstructive jaundice with palpable mass which revealed advanced stage of the disease but no regional lymphadenopathy was present.

The etiology and pathogenesis of gallbladder carcinoma is not well known but, two important causative possibilities are gallstones and parasitic infestations. Other etiologies that are associated with increased incidence of carcinoma gall bladder are calcified porcelain gall bladder, adenomatous polyps, chronic *Salmonella typhi* infection, carcinogens (eg. radon) and abnormal pancreaticobiliary duct junction (APBDJ). Computed tomography (CT) scan should be performed for patients suspected of gallbladder carcinoma. Magnetic resonance imaging (MRI) and magnetic resonance cholangiopancreatography (MRCP) provide additional information about local invasion.

Surgical resection is the mainstay of treatment for patients with gallbladder carcinoma. Adjuvant chemoradiotherapy is associated with decreased rates of local recurrence, however efficacy and impact of these regimens on survival is unclear. In our case GB mass was engulfing cystic duct, cystic artery, hepatic artery, CBD and infiltrating porta hepatis but no regional lymphadenopathy was found. Extended cholecystectomy with Roux-en-Y hepaticojejunostomy was done. Important prognostic factors include residual tumour status, type of resection, patient age, and blood vessel invasion. The overall prognosis of squamous cell carcinoma is better than adenocarcinoma.

III. CONCLUSION

Squamous cell carcinoma of gall bladder is a rare entity. Radical resection is the mainstay of treatment for locally invasive squamous cell carcinoma. Early diagnosis is the most important parameter for improving the survival of the patient.

ETHICAL APPROVAL

Written informed consent was obtained from the patient for publication of this case report and accompanying images. A copy of written consent is available for review by the Editor-in-Chief of this journal.

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