

## **Case report**

# **An Unusual Reach of Gallbladder Cancer: A**

## **Case Report.**

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### **ABSTRACT**

Introduction: Gallbladder cancer (GBC) is one of the common malignancies of the biliary tree but due to its non specific presentations it always presents in advance stage. Poor prognosis of GBC is due to early metastasis into the liver bed and the regional lymph nodes (LNs). Extra abdominal metastasis is rare in GBC and here we are presenting a case of gallbladder cancer with left inguinal lymph node metastasis.

Case report: A 69 year old male presented with complains of yellowish discoloration of eye and urine for 3 months and swelling over the left groin, fever, pain abdomen and loss of appetite for 1 week. Systemic examination revealed gallbladder mass and bilateral inguinal lymphadenopathy. CT scan and FNAC confirm carcinoma gallbladder with metastatic adenocarcinoma.

Discussion: Carcinoma Gallbladder is the most common biliary tree malignancy with as high as 80-95% incidence. The cystic and pericholedochal LNs are the first site to get involved in lymphatic spread [1]. There are three major pathways of lymphatic's spread for CGB which ultimately drains into aortocaval LNs. Lymphatic channel blockage by tumour cells leads to the flow of the lymph into retrograde fashion into some unusual sites. Similarly in our case also retrograde flow must have involved the paraaortic LNs from where it must have spread into the pelvic and

bilateral Inguinal LNs.

Conclusion: To conclude, bilateral inguinal metastasis is possible in CGB due to retrograde lymph flow due to lymphatic obstruction.

*Keywords: Carcinoma gallbladder, lymphatic spread, retrograde lymph flow, inguinal lymph node*

## 1. INTRODUCTION

Gallbladder cancer (GBC) is one of the common malignancies of the biliary tree but due to its non specific presentations it always presents in advance stage [1]. Poor prognosis of GBC is due to early metastasis into the liver bed and the regional lymph nodes (LNs) [2]. GBC are usually an incidental finding (0.25-3%) and mainly detected during or after laparoscopic cholecystectomy for gallstone diseases [3]. Extra abdominal metastasis is rare in GBC [4] and here we are presenting a case of gallbladder cancer with left inguinal lymph node metastasis.

## 2. CASE REPORT:

A 69 year old male presented with complains of yellowish discoloration of eye and urine for 3 months and fever, pain abdomen and loss of appetite for 1 week. Patient noticed yellowish discoloration of eye and urine 3 months back for which he took some herbal medicine following which the severity has increased. Yellowish discoloration of eye is progressively increasing. Patient also gave history of occasional generalized itching. Patient noticed multiple swelling in his left groin 1 week after the starting of the herbal medicine. The left groin swelling was progressively increasing in size and not associated with pain. On initial

assessment, general condition of the patient was very poor. Patient was cachectic, dehydrated and icteric. Abdominal examination revealed solitary oval mass in right hypochondrium. It was hard in consistency, non tender and moves with respiration. Liver was also two finger breath enlarged. Rest of the examination was within normal limit. There was no cervical lymphadenopathy. There were multiple (LNs) in bilateral inguinal region. The left sided lymphadenopathy was larger in size compared to the right side. LNs were hard and non tender with partially restricted mobility. There's no skin lesion in neither lower limbs nor he underwent any instrumentation or surgical procedure in groin or limbs. Biochemical investigation revealed deranged Liver function test. USG abdomen detected focal mass lesion in the Gallbladder and no evidence of gallstones. CT scan showed dilated Gallbladder with eccentric wall thickening with marked dilated Intrahepatic Biliary radicals and abrupt narrowing of the proximal common hepatic duct. FNAC from the left inguinal lymph node confirms metastatic adenocarcinoma. Demerit of this case report is the Immunohistochemistry study which is not available in our hospital. Our plan was to do Percutaneous Transhepatic Biliary Drainage (PTBD) followed by chemotherapy after the general condition of the patient improves. In View of his advance disease and poor socioeconomic status patient refused further treatment.

### **3. RESULTS AND DISCUSSION**

Carcinoma Gallbladder is the most common biliary tree malignancy with as high as 80-95% incidence [5]. Highest incidence of CGB has been reported from India, Asia, Europe and South America [6]. Incidence of CGB in India is 1.8% [7]. The incidence of CGB rises progressively with age and two to six times more common in females. Among all the risk factors Gallstones contributes as high as 70-94% [6].

Clinical features of CGB is non specific and mimic symptoms of cholecystitis or other benign gallbladder pathology and that it why it leads to low index of suspicion for cancer in most of

the cases [8]. In older patient history of pain abdomen with recent onset of weight loss should raise the alarm. The pain will be diffuse compared to crampy right upper quadrant pain as seen in biliary colic [9]. Symptoms of persistent pain, weight loss, anorexia, jaundice, and a palpable right upper quadrant mass are typically indicative of advanced disease [10].

CGB can spread either by direct invasion or by lymphatic, vascular, neural, intraperitoneal and intraductal route. It mainly metastasized to the liver, LNs, adjacent organs and peritoneum. Local regional spread is more common than distant metastasis [11]. The cystic and pericholedochal LNs are the first site to get involved in lymphatic spread [1]. CGB spread via various pathways. The primary route is called the cholecystoretropancreatic pathway where the lymphatic from GB drains into the LNs along the cystic duct and common bile duct and then to the nodes posterior to duodenum and pancreatic. Secondary route is the cholecysto-celiac pathway in which lymphatic's drainage through the gastrohepatic ligament to retroportal and right celiac LNs and the third pathway is the cholecysto-mesenteric pathway where it drains the posterior aspect of GB to the aortocaval LNs via pancreas [11].

There are reports of CGB metastasis to Stomach, duodenum, colon, breast, orbit, skin, ovaries, umbilicus and bones also [7, 12].

Retrograde tumour spread is a known fact. There are only few reported cases of CGB metastasized into inguinal LNs. Lymphatic channel blockage by tumour cells leads to the flow of the lymph into retrograde fashion into some unusual sites [13]. Similarly in our case also retrograde flow must have involved the paraaortic LNs from where it must have spread into the pelvic and bilateral Inguinal LNs.

#### **4. CONCLUSION**

To conclude, tumour spread via lymphatic's from Gall Bladder to inguinal lymph nodes is not a usual pathway and lymphatic blockade resulting in retrograde lymph flow and spread of tumour cells in unusual sites like inguinal lymph node is also to be consider in Carcinoma Gallbladder.

#### **CONSENT (WHERE EVER APPLICABLE)**

N/A

#### **ETHICAL APPROVAL (WHERE EVER APPLICABLE)**

N/A

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FIGURES:

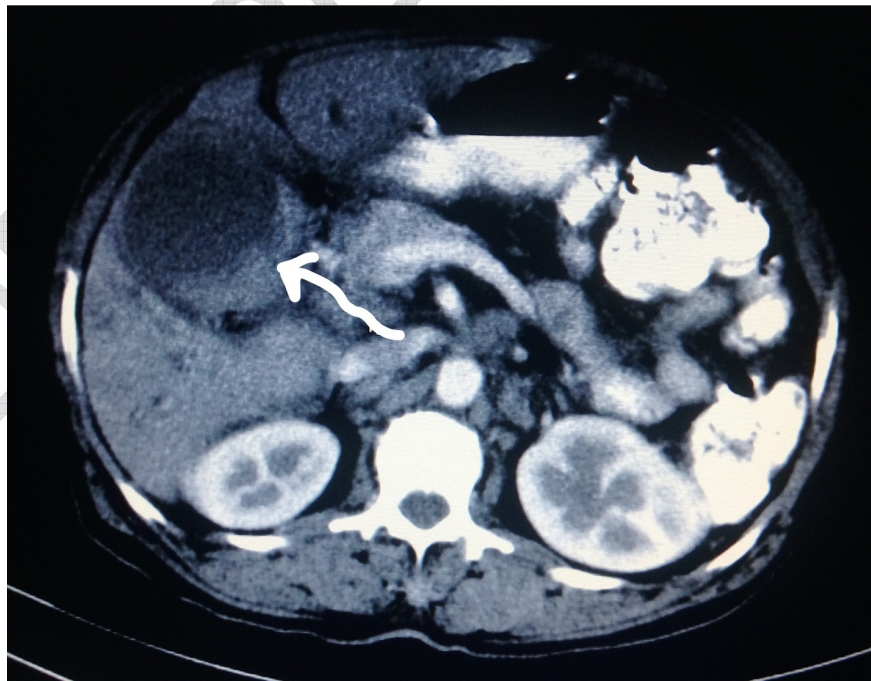


Figure1:

Figure 2:

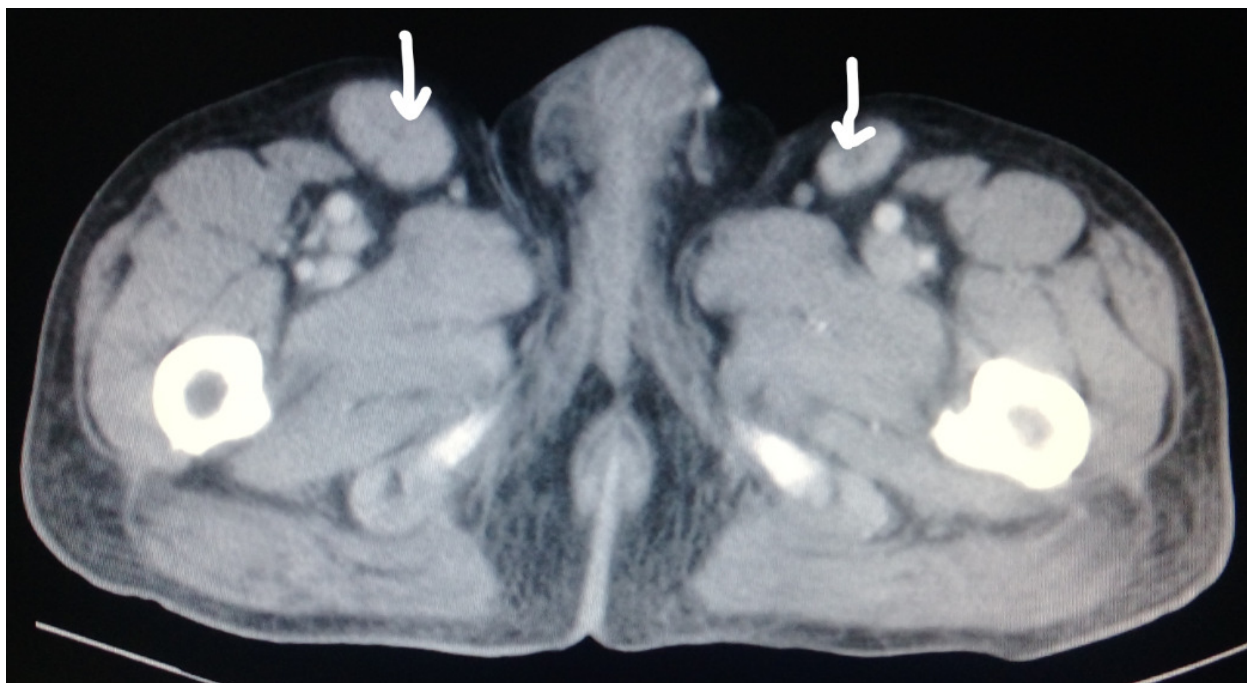
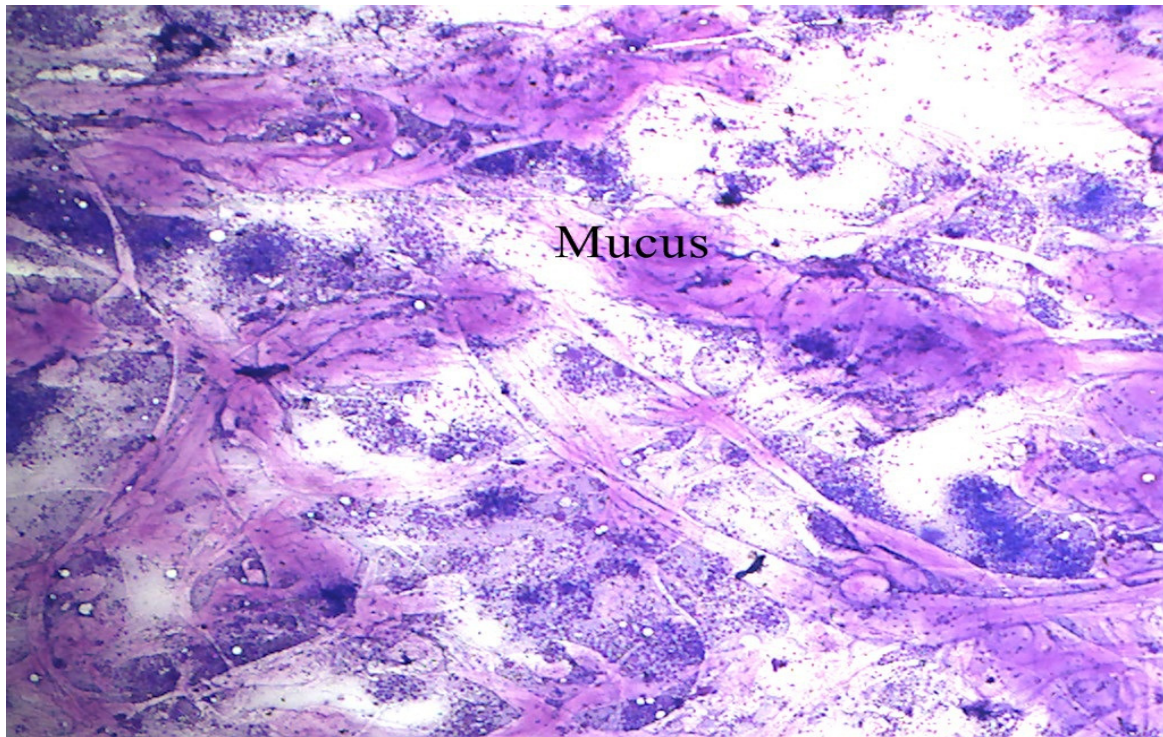


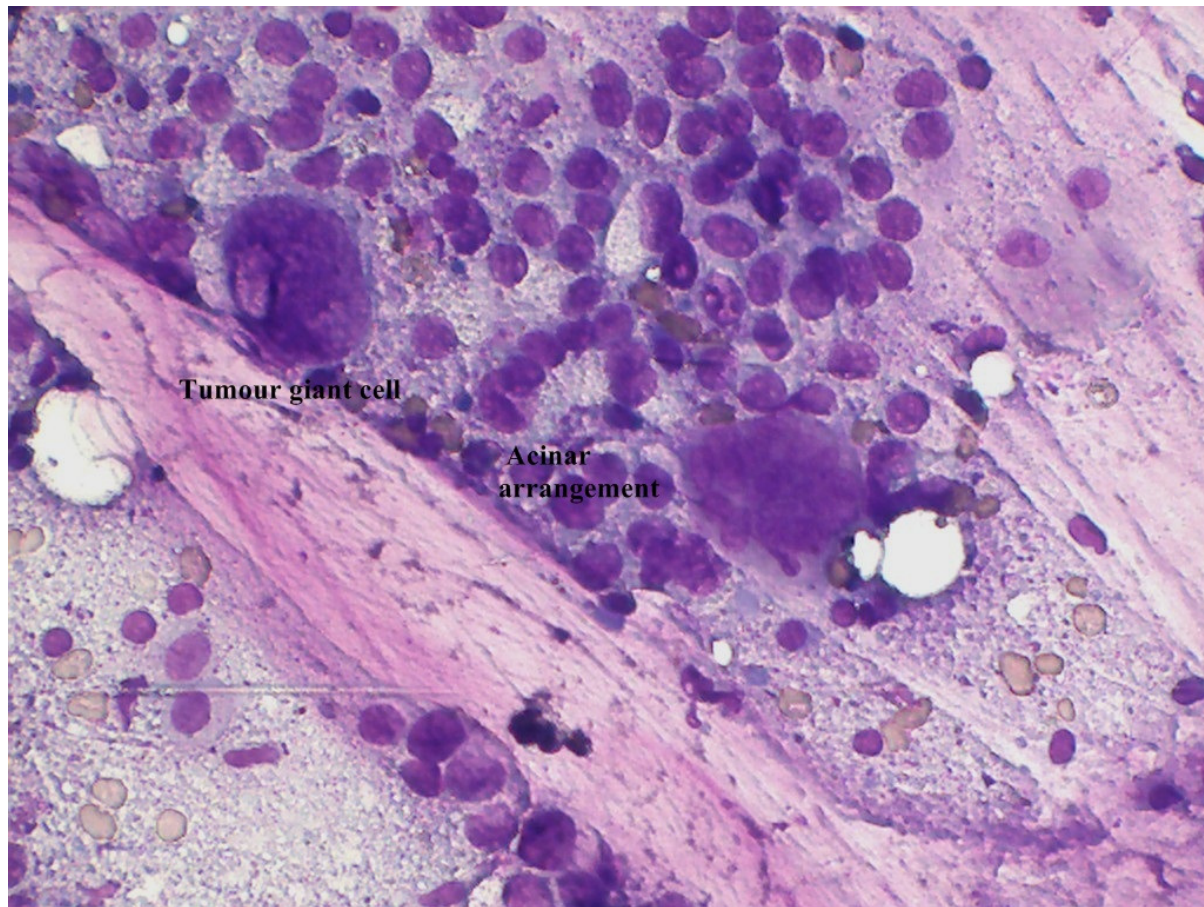


Figure3:

3 a)



**3 b)**



**LEGENDS:**

Figures 1:

CT scan revealed dilated Gallbladder with eccentric wall thickening (white arrow) suggestive of carcinoma gall bladder with marked dilated Intrahepatic Biliary radicals and abrupt narrowing of the proximal common hepatic duct.

Figures 2:

CECT PELVIC REGION shows bilateral inguinal lymphadenopathy (white arrows).

Figure 3:

Cell rich smears containing cohesive clusters, sheets and fragments of malignant cuboidal epithelial cells and occasional tumour giant cells. Acinar differentiation is seen. Background contains mucinous material and some lymphoid cells.

3a) Cellular smear with abundant Mucus [MGG stain]

3b) Magnified view

UNDER PEER REVIEW