

## Case Report

# Sacrum metastasis in carcinoma gall bladder: an unusual presentation

Sanjay Sajeevan<sup>1</sup>, Biswajyoti Das<sup>1</sup>, Yanpothung Yanthan<sup>1</sup>, Naseef P. K.<sup>1</sup>, Sweety Gupta<sup>1\*</sup>,  
Amit Gupta<sup>2</sup>, Manishi L. Narayan<sup>3</sup>, Manoj Gupta<sup>1</sup>

<sup>1</sup>Department of Radiation Oncology, <sup>2</sup>Department of General Surgery, <sup>3</sup>Department of Nuclear Medicine, All India Institute of Medical Sciences, Rishikesh, Uttarakhand, India

**Received:** 12 March 2020

**Accepted:** 17 March 2020

**\*Correspondence:**

Dr. Sweety Gupta,

E-mail: drsg2411@yahoo.co.in

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### ABSTRACT

Disseminated blood-borne metastases from carcinoma of the gall bladder are uncommon and usually occur late. The most common site of extra-abdominal metastasis is lung followed by brain. Skeletal metastases in carcinoma gall bladder are very rare. To date there have only been a few case reports of bone metastasis in carcinoma gall bladder at the time of presentation. Authors here present a rare case of carcinoma gall bladder that progressed to isolated sacrum metastasis.

**Keywords:** Gall bladder carcinoma, Osseous metastases, Palliation

### INTRODUCTION

Gallbladder carcinoma is the sixth most common gastrointestinal malignancy. In view of non-specific symptoms patients usually present at advanced stages. In carcinoma Gall bladder site of metastases can occur to any organ but skeletal involvement is rare.<sup>1,2</sup> Only very few cases of skeletal metastases have been reported in literature. We here report a rare case of carcinoma gall bladder which metastasized to sacrum during the course of disease.

### CASE REPORT

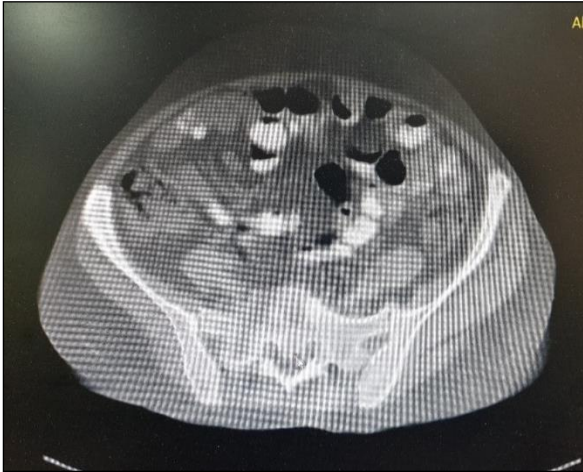
A 40 years female presented to Surgery outpatient department with chief complaints of right upper abdomen pain and yellowish discoloration of palms, soles and eyes for one month. Pain was not associated with nausea, vomiting and fever. It was dull aching continuous and relieved by taking medication. On clinical examination her general condition was fair with ECOG 1. Her sclera was icteric and her oral mucosa, palms, soles, nail beds were having yellow discoloration. On abdomen examination there was tenderness in the right

hypochondrium region and firm to hard lump was palpable extending up to 4 cm below the right costal margin. There was no peripheral lymphadenopathy. Other systemic examinations was normal.

Baseline liver function tests were consistent with obstructive jaundice. Ultrasonographic examination of whole abdomen reported mass arising from gallbladder infiltrating into adjacent right lobe of liver. Multiple lymph nodes were enlarged in porta and pancreatic region. Multiple calculi were also noted within the gallbladder mass. Contrast enhanced computed tomography reported mural thickening of gallbladder, contiguous infiltration of common hepatic duct, bilobar intrahepatic biliary dilatation and pneumobilia. There was infiltration in segment IVb, V of liver and infiltration of lateral wall of 2<sup>nd</sup> part of duodenum with multiple liver nodules suggestive of metastases. Few subcentrimetric nodes were seen in peripancreatic and portal regions.

Her routine blood investigations were normal. Serum CA were 19.9- 1754.6 U/ml and Serum CEA- 251.8 ng/ml. Fine needle aspiration cytology from gallbladder mass reported poorly differentiated adenocarcinoma. In view of

obstructive jaundice she was considered for internal stenting. As disease was unresectable, she was planned for Gemcitabine based palliative chemotherapy. After 6 cycles of chemotherapy response assessment CECT scan abdomen reported partial response. But in view of poor tolerance she was started oral capecitabine. After 6th cycle she complained of decreased sensation in perianal region and low back ache.



**Figure 1: CECT abdomen it is well defined heterogeneously enhancing soft tissue lesion with erosion of sacral s2 and s3 region suggestive of metastases (arrow).**



**Figure 2: 99mTc-MDP bone scan of mixed lytic sclerotic lesion in sacrum.**

CECT scan of abdomen reported intramurally heterogeneously enhancing mass lesion 2.3x1.3 cm in fundus and body of gall bladder with infiltration of segment V of liver with well-defined heterogeneously enhancing soft tissue lesion with erosion of sacral S2 and S3 region suggestive of metastases (Figure 1). Radionuclide bone scan was done which reported mixed sclerotic lesion in sacrum suggestive of metastasis and

subtle lytic lesion in L2-L4 without any tracer abnormality (Figure 2). As patient was symptomatic she was considered for palliative radiotherapy to sacral region. In view of poor performance status, she was considered for supportive care.

## DISCUSSION

The prognosis of gallbladder carcinoma is generally poor as it presents as a very advanced disease. Distant metastasis from gallbladder carcinoma occurs most commonly to the liver (76-86%); regional lymph nodes involvement occurs in around 60% of cases. Gall bladder cancer can metastasize to almost every organ (including liver, lymph nodes, adrenal glands, kidneys, spleen, brain, breasts, thyroid, heart and uterus), metastasis to the osseous system is the least frequent.<sup>3-5</sup> Lytic lesion is the most common in osseous metastases and our patient had mixed lytic and sclerotic lesion in sacrum. Also, liver is most common site of metastasis but our patient had disease progression at sacrum which is a rare location. In literature bone metastases from gall bladder cancer have been reported at skull, femur, vertebrae (cervical, thoracic, lumbar, sacrum).<sup>6-9</sup> As reported though skeletal system is a rare site for metastases but any bone may be affected by the disease. Gall bladder malignancy carries a poor prognosis and if metastatic, aim of treatment is palliation of symptoms and quality of life of patient. Our patient had advanced disease at presentation but with palliative chemotherapy she has survived till date i.e. more than 14 months after the diagnosis. Therefore, in such patient's management strategy should be modified to each patient with intent of providing maximum relief with minimum side effects. Palliative radiotherapy and chemotherapy may even prolong life in select patients with advanced disease as in our patient.

*Funding: No funding sources*

*Conflict of interest: None declared*

*Ethical approval: Not required*

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**Cite this article as:** Sajeevan S, Das B, Yanthan Y, Naseef PK, Gupta S, Gupta A, et al. Sacrum metastasis in carcinoma gall bladder: an unusual presentation. *Int J Res Med Sci* 2020;8:1884-6.