



AN ATYPICAL METASTASIS OF CA GALL BLADDER TO BONE: A RARE CASE STUDY

General Medicine

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ABSTRACT

Primary gallbladder carcinoma is a highly aggressive cancer typically diagnosed at an advanced stage in most patients. It frequently spreads to the nearby liver tissue and through the lymphatic system to the mesenteric nodes. Instances of metastasis to sites outside the abdomen are exceptionally uncommon. However, we document a rare case where vertebral metastases from gallbladder cancer were detected through whole-body PET/CT, despite the absence of local lymph node enlargement and without causing any symptoms

KEYWORDS

Gall Bladder Cancer, Vertebral Metastasis, Pet Ct

INTRODUCTION

Gallbladder cancer is an aggressive malignant disease with an extremely poor prognosis and no specific presenting symptoms. A high proportion of patients present with advanced disease. It typically occurs in the 6th to 7th decades of life and is more common in females than males.

Gallbladder cancer is most commonly an adenocarcinoma, although squamous cell carcinoma, adenosquamous carcinoma, or carcinoid tumors can occasionally occur. The most common route of spread is direct invasion into the liver, bile duct, duodenum, colon, and kidney. Lymphatic spread occurs through the lymph nodes of Lund, periportal nodes, peripancreatic nodes, and periduodenal nodes. Additionally, perineural spread and hematogenous spread to the lungs are observed, with bone being the least common site of metastasis.

In 75 to 98% of gallbladder cancer cases, patients have gallstones, with large gallstones (greater than 3 cm) being a significant risk factor. The chance of developing gallbladder cancer in the presence of large stones is up to 3%.

The highest incidence of gallbladder cancer is found in India and Pakistan. Among the North American population, Native Americans and immigrants from Latin America have the highest rates.

Histologically, gallbladder cancer can be classified into different types:

- Diffuse infiltrative/sclerosing: The most common type, associated with the worst prognosis.
- Nodular
- Papillary: This type has the best prognosis.

CASE:-We report a rare case of 58 year old female presented with upper backache radiating to right upper limb with tingling sensation than progress to bilateral lower limb weakness associated with sensory loss (bilateral lower limb) with involvement of bowel and bladder since past 2 months.

Following which patient came to Ananta hospital in neurosurgery department and CT dorsal spine suggestive of compression fracture of D4 vertebral body with near complete loss of body height is seen. Lytic lesion in left pedicle of D4 vertebrae. There is associated extraosseous anterior epidural soft tissue component is seen probably causing compression over cord.

For which D3, D4 Laminectomy with decompression of cord has been done and treated accordingly and tissue has been sent for

histopathological examination of D4 vertebral body which suggestive of metastatic adenocarcinoma of unknown origin

Following which patient has been sent to onco medicine department for further evaluation, PET CT was done and diagnosed as Ca Gall Bladder with bony metastasis without significant alteration in Liver Function Test.

CBC	HB-14.3 TLC-8.6 PLT-177K
RFT	UREA- 27.8 CREAT-0.6 URIC ACID -3.2 Na-138 K-4.4 Cl-103
LFT	BIL(T/D/I)-0.6/0.1/0.5 SGOT-91 SGPT 218 ALP-255 TOTAL PROTEIN- 7.9 ALBUMIN- 3.9 GLOBULIN-4 A/G RATIO-0.9
HHH	NON REACTIVE
CT DORSAL SPINE	COMPRESSION FRACTURE OF D4 VERTEBRAL BODY WITH NEAR COMPLETE LOSS OF BODY HEIGHT IS SEEN. LYTIC LESION IN LEFT PEDICLE OF D4 VERTEBRAE , THERE IS ASSOCIATED EXTRAOSSEOUS ANTERIOR EPIDURAL SOFT TISSUE COMPONENT IS SEEN PROBABLY CAUSING COMPRESSION OF CORD.
HPE	FEATURES ARE OF METASTATIC ADENOCARCINOMA IN EXCISED TISSUE FROM D4 VERTEBRAL BODY PATHOLOGICAL FRACTURE SITE
PET CT	HYPERMETABOLIC ILL DEFINED MINIMALLY ENHANCING SOFT TISSUE THICKENING IS SEEN IN FUNDUS OF GALL BLADDER , HYPERMETABOLIC LYTIC SCLEROTIC LESIONS INVOLVING STERNUM, BODY OF D10 VERTEBRA AND LEFT ILIAC BONE NEAR SI JOINT LIKELY METASTATIC , POST D3,D4 LAMINECTOMY DECOMPRESSION AND FIXATION SCREW IN SITU STATUS WITH FDG AVID LYTIC SCLEROTIC LESION INVOLVING D3 AND D4 VERTEBRAE LIKELY METASTATIC.

CASE SUMMARY:

A 58-year-old female underwent surgery for a pathological fracture of the D4 vertebra. Histopathological examination revealed adenocarcinoma of unknown origin. Subsequent FDG PET-CT confirmed the diagnosis as gallbladder carcinoma.



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