

An Unusual Case of Gall Bladder Carcinoma with Cutaneous Metastasis in Chest Wall and Vagina

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Introduction

Gallbladder cancer (GBC) is the sixth most common cancer of the gastrointestinal (GI) tract and the most common cancer of the biliary tree.¹

Gallbladder carcinoma is not only a rare but also a highly lethal disease with an overall 5-year survival rate of 5%.²

It is an aggressive tumor that is often found incidentally after a cholecystectomy as patients often remain asymptomatic in the early stages.³

Symptoms associated with GBC can be vague and nonspecific, further complicating early detection.⁴

Cutaneous metastasis (CM) is an uncommon manifestation of visceral malignancies with a reported incidence of 0.7–9%.⁵

Cutaneous metastases from visceral carcinoma are uncommon but, when present, are a valuable clue to the presence of occult malignant neoplasms. The

occurrence of cutaneous metastases is said to be an ominous prognostic sign.⁶

Breast cancer is the most common site for cutaneous metastasis, followed by the lung, colorectal, renal, ovarian, and bladder cancers.⁵

GBC commonly metastasizes to the liver and regional lymph nodes, whereas skin metastasis is extremely rare. Although cutaneous metastasis occurs usually at the terminal stage of the disease, it may rarely present concurrent with the primary. In the present case skin metastases and primary cancer were diagnosed at the same time.

Case Report

A 74year old female presented with pain in right upper abdomen since 15 days, with history of constipation and hard stools. The patient had a chest nodule measuring 2X1cm and on further examination a vaginal ulcer measuring 1X0.5cm was also noted. USG abdomen was suggestive of neoplastic lesion in left

lobe of liver. CECT abdomen was suggestive of gall bladder neoplasm.

Smears from Ultrasound guided Fine Needle Aspiration Cytology of gall bladder mass showed loosely cohesive clusters of epithelial cells with acinar formation. FNAC was suggestive of adenocarcinoma.

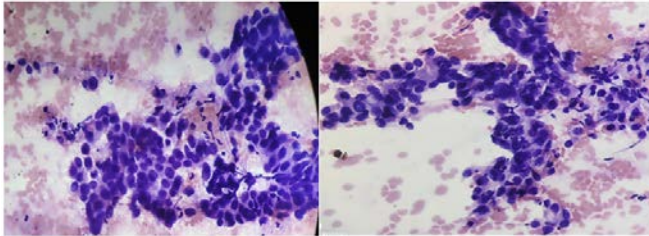


Figure 1

Biopsy from the vaginal lesion showed round to polygonal tumor cells with brown coloured pigment in the cytoplasm, suggestive of melanoma.



Figure 2 a

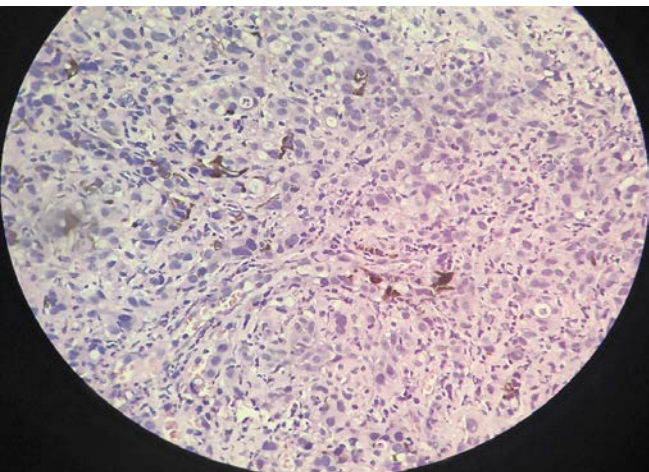


Figure 2 b

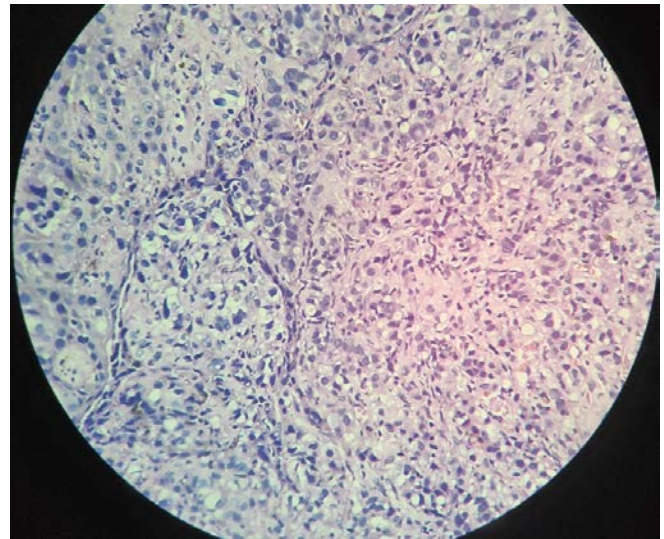


Figure 2c

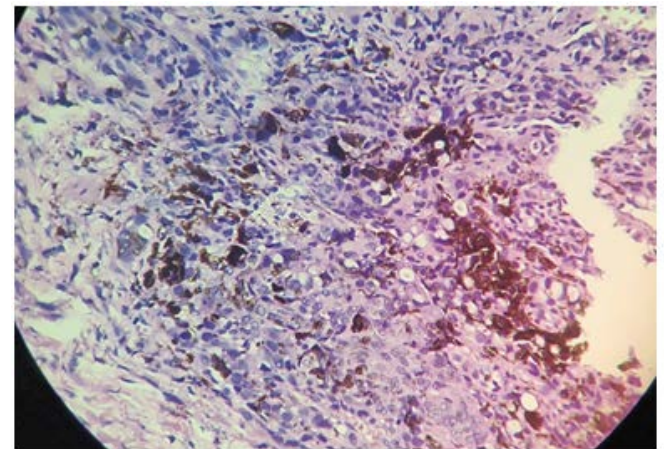


Figure 2d

Figure 2 a: Gross picture showing an ulcerated nodule.

Figure 2 B,c,d: Sections showed nests and clusters of round to polygonal tumor cells with brown coloured pigment in the cytoplasm.

IHC Vaginal Ulcerated nodule biopsy : The tumor cells expressed **CK-7** and **CK-19**. Tumor cells were immunonegative for CK-20, CA 19.9, Pax 8, TTF-1, CDX 2, Synaptophysin, Chromogranin A, SOX 10 and S-100 protein. IHC confirmed the diagnosis of metastasis of gall bladder adenocarcinoma.

FNAC from the chest nodule was suggestive of metastatic deposits of adenocarcinoma.



Figure 3a

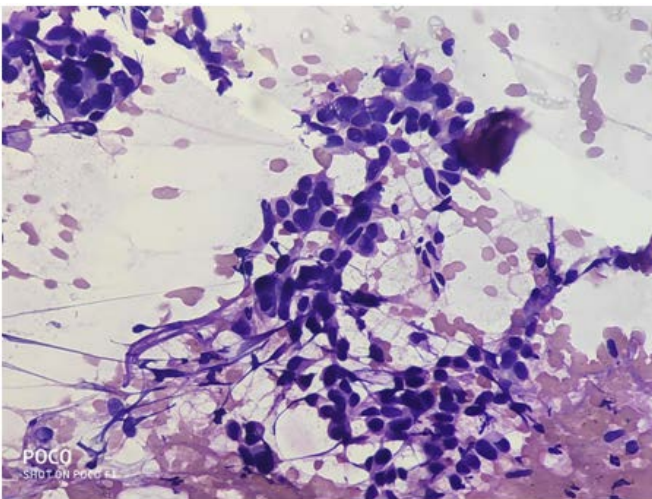


Figure b

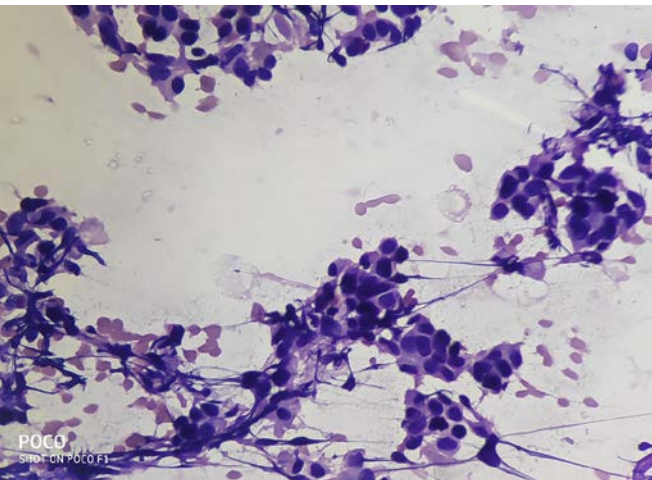


Figure c

Figure 3a: Gross image showing the chest nodule.

Figure 3 b and c: smears showing groups and clusters of tumor cells and acinar pattern.

Final Diagnosis: Gall bladder adenocarcinoma with cutaneous metastatic deposits in chest wall and vagina.

Discussion

- Gallbladder carcinoma commonly metastasizes to the liver and regional lymph nodes, and less commonly is associated with extra-abdominal dissemination.⁷
- Cutaneous metastases from any visceral malignancy is rare and is indicative of poor prognosis.
- We reported here a rare case of gall bladder carcinoma with metastatic deposits in chest wall and vagina, which is extremely rare.
- Most cutaneous metastasis occur in a body region near the primary tumor. But in our case, the cutaneous metastases are away from the primary tumor.
- Other unusual sites of metastasis of carcinoma of the gallbladder are occasionally encountered.⁸
- The most common presenting symptom of gall bladder carcinoma is abdominal pain in the right upper quadrant. Patients with advanced disease are more likely to have nausea, vomiting, anorexia, weight loss, jaundice and a palpable mass. Even with advanced diagnostic imaging, carcinoma of the gallbladder is more likely to be diagnosed at a later stage and having metastasis in up to a third of these patients.⁹
- The skin lesions are easily accessible to fine needle aspiration cytology (FNAC) and may help in the diagnosis of the primary.¹⁰
- In the reviewed literature there is no any case of vaginal metastasis of gall bladder carcinoma and

very few cases of cutaneous metastasis are reported till date. This case illustrates an unusual dissemination and appears to be the 1st case of vaginal metastasis of gall bladder carcinoma.

Conclusion

- Gallbladder carcinoma (GBC) is a rare and aggressive disease, which has the tendency to metastasize to distant lymph nodes and the liver. Cutaneous Metastasis is an uncommon presentation of malignancy.
- This case study describes a case of GBC metastasis to the chest wall and vagina. Clinicians should always be wary of uncommon metastatic presentations in patients with malignancy, as management recommendation can change drastically.³
- Careful examination of cutaneous lesions is helpful in determining the underlying pathology. Cutaneous Metastasis can be a diagnostic trap and a high level of suspicion is necessary

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