

Inguinal Mass: An Unusual Presentation of Gastroesophageal Junction Adenocarcinoma

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Abstract

Gastroesophageal junction (GEJ) tumors are inherently aggressive owing to their location near vital structures and early lymphatic spread. The usual symptoms at presentation are dysphagia, regurgitation, and weight loss. Lymphatic involvement is seen early due to abundant submucosal lymphatics and is an important prognostic marker. Nodal involvement is frequently seen in the mediastinum and abdomen as these are the loco-regional nodal basins. Nodal spread beyond these basins is infrequent. We report a case of GEJ adenocarcinoma with inguinal mass secondary to inguinal nodal metastasis as a presenting symptom.

Keywords: Gastroesophageal junction cancer, gastroesophageal junction tumor, inguinal metastasis, nodal metastasis, unusual metastasis

INTRODUCTION

Gastroesophageal junction (GEJ) cancer refers to tumors that have their epicenter within 5 cm proximal and distal to the anatomic GEJ.^[1] Currently, as per the American Joint Committee on Cancer (7th edition), these tumors are grouped under esophageal cancers provided the anatomic GEJ is involved.^[2] GEJ cancers are known for their propensity for early nodal involvement due to abundant lymphatic plexus in the gastroesophageal region. Regional nodes are often involved at the time of diagnosis in the majority of patients with GEJ cancer except in those with early-stage tumor. In advanced GEJ cancer, tumor spread may involve nodal groups further away from the tumor. Cervical nodes are the most often involved nonregional nodes in GEJ cancers and point toward incurability and a grim prognosis. Rarely, due to overwhelming lymphatic involvement, afferent lymphatic pathways may get blocked and tumor cells may find unusual routes for metastasis. Although inguinal metastasis from upper digestive tract has been reported previously, it is rarely encountered as the presenting symptom.^[3,4]

CASE REPORT

A 58-year-old man presented with left inguinal swelling of 1-month duration. He did not have dysphagia, gastrointestinal

bleeding, alteration in bowel habits, jaundice, or respiratory symptoms. Clinical examination revealed a hard left inguinal node mass of size 5 cm × 4 cm [Figure 1]. Besides, he had a hard left supraclavicular node of size 1.5 cm × 1.5 cm. Rest of the systemic examination was unremarkable. Fine-needle aspiration cytology done from the cervical and inguinal node was suggestive of metastatic mucin secreting adenocarcinoma [Figures 2b-d].

To identify the primary tumor, an upper gastrointestinal endoscopy was done that revealed an ulceroproliferative growth involving GEJ. Biopsy from the growth was suggestive of mucin-secreting adenocarcinoma [Figure 2a]. Contrast-enhanced computed tomography of the neck, thorax, and abdomen revealed heterogeneously enhancing growth involving GEJ and proximal stomach along with multiple enlarged lymph nodes in neck, mediastinum, perigastric, para-aortic, and inguinal regions [Figures 3a-d]. Rest of the gastrointestinal tract, solid organs, and lungs were normal. In

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Figure 1: Clinical photograph showing left inguinal mass (black dotted circle)

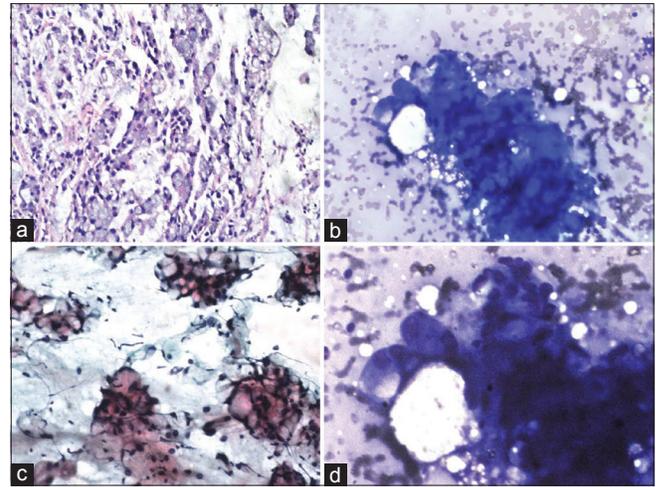


Figure 2: (a) Biopsy from the gastroesophageal junction growth shows mucin secreting adenocarcinoma (H and E, $\times 40$); (b and c) Fine needle aspiration cytology from inguinal lymph node shows clusters of tumor cells with intracytoplasmic mucin (Giemsa and Pap, $\times 100$); (d) Fine needle aspiration cytology from cervical lymph node shows similar cytomorphology (Giemsa, $\times 400$)

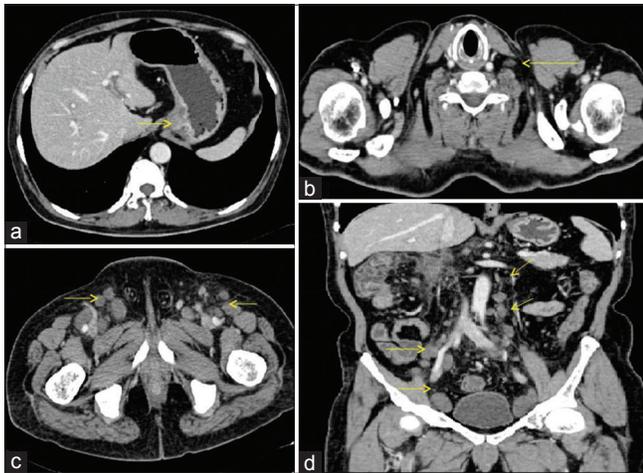


Figure 3: Contrast-enhanced computed tomography abdomen: (a) Axial cuts at the level of gastroesophageal junction showing heterogeneously enhancing wall thickening; (b) Axial cut of neck showing enlarged left supraclavicular lymph node; (c) Axial cut at the inguinal region showing bilateral multiple enlarged nodes; (d) Coronal reconstruction showing multiple enlarged paraaortic, iliac, and pelvic lymph nodes

view of metastatic GEJ tumor, the patient received palliative chemotherapy.

DISCUSSION

Inguinal nodal metastasis from GEJ cancer is rare and has not been reported till date. There have been a few reports of inguinal metastasis from gastric cancer.^[3,4] Probable mechanism for inguinal lymph node metastasis in both GEJ and gastric cancer appears to be same. The proposed hypothesis for this occurrence is extensive tumor infiltration of loco-regional lymphatics leading to their blockage and subsequent retrograde flow through paraaortic nodes to inguinal nodes.^[5] In the present report, the patient had both supraclavicular and inguinal node metastasis. Extensive tumor infiltration of cisterna chyli would have resulted in blockage of the thoracic duct with a subsequent retrograde

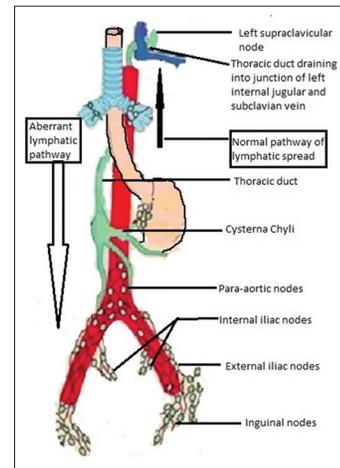


Figure 4: Schematic diagram depicting normal upward lymphatic flow (solid arrow) and downward aberrant lymphatic flow secondary to tumor infiltration and blockade of normal pathway

flow [Figure 4]. The above mechanism is supported by the conspicuous paraaortic involvement in the present case. Inguinal nodal metastasis is equivalent to distant spread in GEJ cancer and carries a poor prognosis. Hence, the patient was referred for palliative chemotherapy. The unique findings of the present report are the presence of both inguinal and supraclavicular lymph node metastases and the initial presentation of the GEJ cancer with inguinal lymph node metastasis.

CONCLUSION

Metastases to inguinal nodes may be secondary to the tumor at distant sites. Whenever local cause for nodal involvement is not found, upper gastrointestinal tract should be screened, as the retrograde lymphatic spread is a possibility.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms.

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Conflicts of interest

There are no conflicts of interest.

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