VIDEO CASE REPORT

Linitis plastica: a harbinger of an unusual cause of gastric wall thickening



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Metastasis to the GI tract is uncommon,¹ but when it occurs, the stomach is the most common site.

The most common primary cancers that metastasize to the stomach include breast and renal cell carcinoma.² Among breast cancers, invasive lobular cancer is known to metastasize more often to the stomach than does invasive ductal cancer.¹ The clinical presentation of such a metastasis is very nonspecific.

The endoscopic presentation is heterogeneous as well, with solitary and submucosal lesions being the most



Figure 1. CT scan showed mild focal thickening of the distal gastric body and antrum.



Figure 2. EGD showed thickened and rigid mucosal folds throughout the stomach, characteristic of linitis plastica.

Written transcript of the video audio is available online at www.VideoGIE.org.



Figure 3. Retroflexion on EGD was successfully performed after some difficulty showing prominent mucosal ridges and revealing a "waffle-like" appearance.



Figure 4. EUS showed a thickened gastric wall and loss of normal walllayer definition with a small amount of perigastric ascites.

common finding. Gastric metastasis indicates a short survival, but in comparison with metastatic disease from other organs, metastases from the breast and kidneys carry better prognoses.²

We present an interesting case of a woman with a known history of breast cancer in remission who was



Figure 5. EUS-guided FNB showed infiltrative neoplastic cells in the gastric wall consistent with a breast primary that stained positive for estrogen receptors. *FNB*, fine-needle biopsy.



Figure 6. PET scan showed increased activity along the gastric antrum/ first part of the duodenum and metabolically active ascites concerning for potential peritoneal implants. *PET*, positron emission tomography.

evaluated for dyspeptic symptoms and weight loss (Fig. 1; Video 1, available online at www.VideoGIE.org). EGD showed diffuse thickening of the entire stomach mucosa, and EUS showed a thickened gastric wall (Figs. 2-4). FNA with a 22G needle was initially attempted, but the yield from rapid on-site evaluation was poor because of the rigidity of the tissue. Fine-needle biopsy (FNB) with a 19G needle was then performed, resulting in a good tissue yield. Histologic examination showed neoplastic infiltration of the stomach wall, and immunohistochemical analysis revealed that the primary cancer was in the breast (Fig. 5). The patient later underwent positron emission tomography, which showed widespread metastatic disease (Fig. 6).

Through this case, we wish to highlight that patients with a known history of cancer should be evaluated with endoscopy and possibly EUS, even when the symptoms appear to be subtle and the primary cancer is known to be in remission. Our anecdotal experience leads us to recommend FNB over FNA for EUS-guided biopsy of gastric linitis plastica. However, after doing a literature review, we find inconclusive evidence to support this practice. In 2015, a study by Attili et al³ found that FNB is not as beneficial for an accurate diagnosis but overall is helpful to pathologists.

DISCLOSURE

All authors disclosed no financial relationships relevant to this publication.

Abbreviation: FNB, fine-needle biopsy.

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