

An unusual case of duodenal metastasis of pulmonary pleomorphic carcinoma

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Dear Editor,

A 50-year-old man visited our emergency department with complaints of hematemesis and melena. He had a prior history of metastatic (brain metastasis) pulmonary pleomorphic carcinoma (PC) for 5 months, and brain radiation therapy was performed for the brain metastasis. He did not undergo chemotherapy because of his poor performance status. He reported a 4-month history of weakness and iron deficiency anemia requiring blood transfusion.

During his physical examination, epigastric tenderness was detected but no rebound or rigidity was found. His digital examination tested positive for melena. His initial blood pressure was 80/60 mmHg, heart rate was 120/min, hemoglobin level was 7.9 g/dL, hematocrit was 23%, and platelet count was 276000/mm³; his prothrombin time/and international normalized ratio (INR) was normal.

Upper gastrointestinal endoscopy was performed; a 3-cm friable mass with a small central ulcer and a small adherent clot was noted in the third part of the duodenum (Figure 1). Endoscopic sclerotherapy with 1:10000 adrenaline was performed, and multiple biopsies were taken from the mass. A histopathological examination of the endoscopic biopsies revealed infiltration of neoplastic cells with eosinophilic macronuclei and pleomorphic islands. Immunohistochemically, the neoplastic cells were negative for TTF1 and p63 and positive for panCK. The pathological findings supported a diagnosis of duodenal metastasis of the metastatic pleomorphic subtype of non-small cell lung cancer (NSCLC) (Figure 2). The patient's condition continued to deteriorate; he developed high grade fever and died two weeks after undergoing upper endoscopy.

Pulmonary PC is a rare subtype of sarcomatoid carcinoma of the lung (1). It comprises 0.3% to 1.3% of all lung cancers (2,3). Pulmonary PC has a more aggressive clinical course and poorer outcome than other types of NSCLCs, and it tends to invade adherent structures and metastasize to distant organs (4,5). Histologically, it contains at least 10% of either spindle or giant cells (6).

The presentation of patients with lung cancer may vary from nonspecific respiratory symptoms to metastatic forms. The most common sites of metastases are the lymph nodes (48%), liver (45%), adrenals (41%), bone (31%), and brain (25%). More rarely, metastases may oc-



Figure 1. Endoscopic view of the duodenal metastasis

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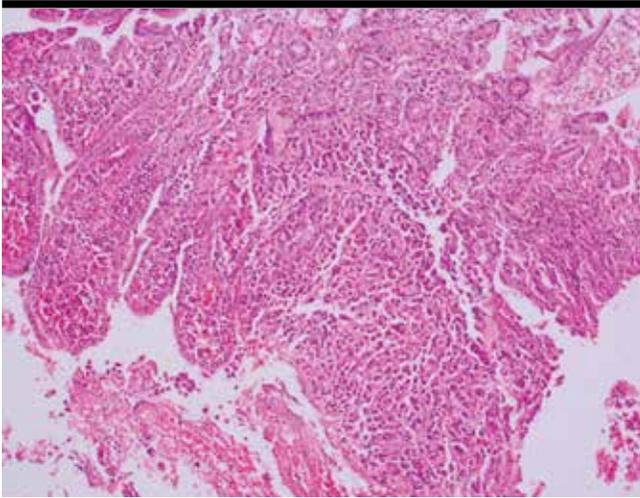


Figure 2. Metastatic tumor cell groups in the duodenal mucosa Hematoxylin-eosin staining x10

cur in the kidneys, stomach, large bowel, and peritoneum. Small bowel metastasis is uncommon, and duodenal metastasis is very rare (7,8). Small bowel metastasis is usually asymptomatic, but when symptomatic, the most common presentations are perforation and obstruction (9). In our case, duodenal metastasis of pulmonary PC was present with iron deficiency anemia and upper gastrointestinal bleeding. In the literature, only three cases of small bowel metastasis from pulmonary PC have been previously reported (9-11). In one of them, the metastatic area was the duodenum; this was diagnosed during autopsy.

In conclusion, in our patient, the metastatic site was the duodenum; our patient also presented with iron deficiency anemia and upper gastrointestinal bleeding. To the best of our knowledge, such a case has not been previously reported in the literature.

Informed Consent: Informed consent was obtained from the patient who participated in this study.

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