Gastric Plasmacytoma: A Rare Entity Presenting as Profound Anemia

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Background

- Plasmacytoma is a neoplasm of plasma cells that does not meet criteria for multiple myeloma.
- Roughly 450 plasmacytomas are diagnosed annually in the United States – less than 5% occur outside the bone marrow (extramedullary plasmacytoma, EMP)
- Majority of EMPs are found in the upper aerodigestive tract (throat, larynx, upper esophagus)
- Gastric Plasmacytoma is less common among EMPs

Case Description

Patient is a 76-year-old male with history of coronary artery disease and remote prostate cancer who presented to our hospital in December 2021 with complaint of dyspnea, chest discomfort, fatigue, and 15-pound weight loss in the last three months. Labs notable for hemoglobin of 3.7g/dL (baseline ~12 with microcytosis several years prior) with low iron and transferrin saturation. Gastroenterology was consulted and performed bi-directional endoscopy. Colonoscopy was unremarkable, but EGD revealed a large, ulcerated mass in the gastric cardia without active bleeding (Figure 1A). Biopsy was obtained, with pathology revealing a plasma cell infiltrate. Advanced testing at Mayo Clinic, Rochester ruled out B-cell lymphoma and MALT lymphoma –

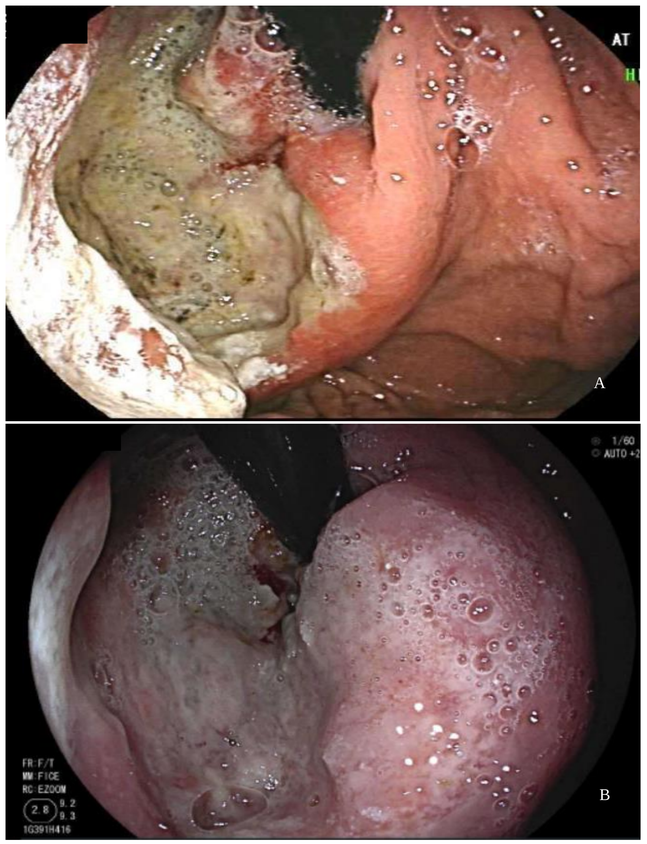

Figure 1. Endoscopic appearance of gastric plasmacytoma
A: Initial appearance of the mass in the gastric cardia.
B: Appearance during repeat EGD three months later for bleeding surveillance – of note, radiation therapy had been started 12 days prior

It instead confirmed monotypic kappa immunoglobulin consistent with a plasmacytoma as well as TP53 & 13q deletions. Additional tests including SPEP, UPEP, and bone marrow biopsy all negative, which ruled out Multiple Myeloma. PET/CT showed abnormal hypermetabolic activity in the expected area of the stomach only, thus confirming solitary gastric plasmacytoma.

Discussion

- Gastric Plasmacytoma is a rare malignancy.
- Most frequently found in men at median age of 55 years old.
- Patients often present with weight loss, vague epigastric pain/discomfort, and/or gastrointestinal bleeding.
- Endoscopic appearance most commonly is ulcerated mass, though can be seen as irregular thickened folds or multiple polyps
- Diagnosis depends on a comprehensive histopathologic examination of a tissue sample.
- The mass can sometimes be seen on imaging, however, there are no pathognomonic radiologic features
- No standardized treatment exists – often responds to radiation, but can require endoscopic versus surgical resection
- Good prognosis. 10-year survival rate is high

Case Outcome

Patient established with Oncology and Radiation Oncology. Completed course of targeted radiation therapy. Repeat EGD pending.

Citations

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