

An Unusual Cause of Iron Deficiency Anemia: Gastric Metastasis from Renal Cell Carcinoma

BE HealthCare

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Introduction

- Renal cell carcinoma (RCC) is known to metastasize anywhere throughout the body.
- The most common sites of RCC metastasis are the lungs (71%), lymph nodes (46%), bone (36%), and liver (21%).
- Metastatic spread to the stomach is exceedingly rare. We describe a case of gastric metastasis from RCC.

Case Description

- A 52-year-old female with a history of seizures, RCC with metastasis to adrenal gland and brain status post Gamma Knife and multiple lines of chemotherapy presented with generalized weakness.
- There was no history of overt gastrointestinal bleeding. The patient took aspirin 81 mg daily, but denied any other NSAID, antiplatelet agent, or anticoagulant use. Her initial hemoglobin was 7.1 gm/dL, decreased from her normal baseline level a month prior to admission. Iron 33. Tsat 13%, Ferritin 130.
- CT PE protocol that was performed 10 days prior to admission revealed interval development of multiple lung nodules, new hyperenhancing liver lesions, and an enhancing mass within the greater curvature of the stomach (image 1).
- An EGD was performed and revealed multiple fungating masses in the gastric body and antrum (image 2,3,4). Biopsies were obtained and confirmed metastatic RCC.
- The patient underwent palliative radiation to the stomach to control bleeding. The patient ultimately died six months later from complications of her metastatic disease.

Radiology



Image 1: CT with hyperenhancing mass within the greater curvature of the stomach. $3.0 \text{ cm} \times 1.7 \text{ cm} \times 3.1 \text{cm}$.

Endoscopy

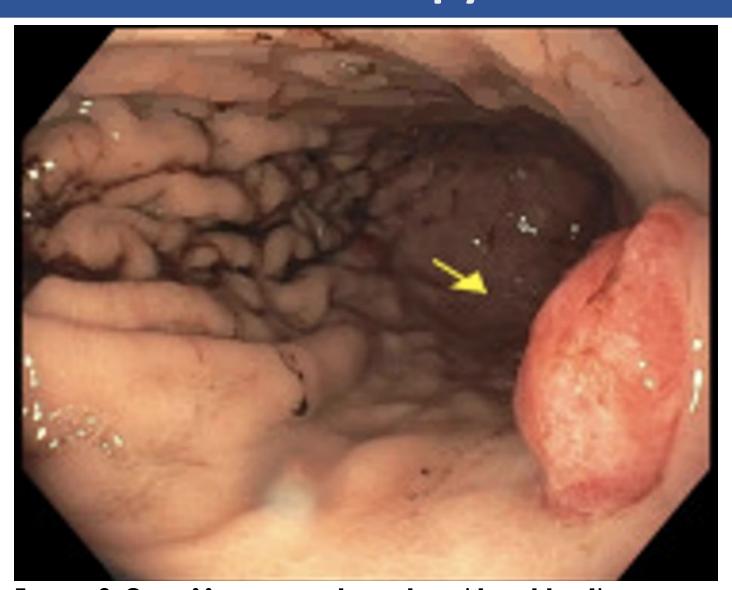




Image 3: Two of four mucosal papules with no bleeding

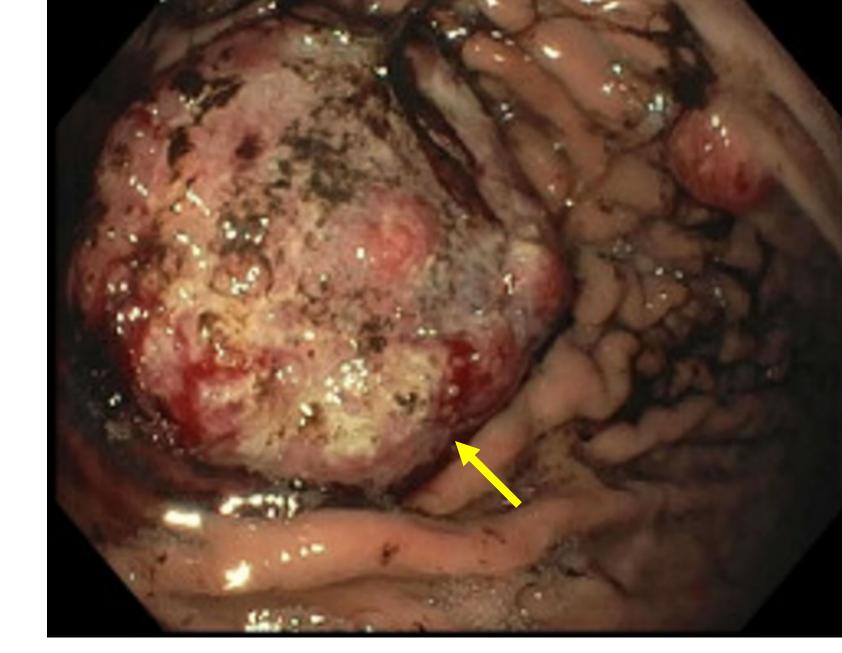


Image 4: Hematin found within stomach. No signs of active bleeding. A Large fungating mass within the greater curvature of the stomach biopsied.

Discussion

- Gastric metastasis from any tumor is extremely uncommon with a reported incidence of 0.2% to 0.7% of cases.
- The most common malignancies presenting as metastatic solid tumors within the stomach are those arising from the breast (27%), lung (24%), esophagus (19%), and kidneys (8%).
- In a single center database of 2,084 post-mortem patients with metastatic renal cell carcinoma, only 5 had gastric involvement.
- Patients with gastric metastases most often present with gastrointestinal bleeding and anemia, with only 13% presenting with abdominal pain.
- In our case, the patient did not present with gastric metastases until 17 months following primary diagnosis.
- Treatment of gastric metastasis varies widely and includes surgical resection, endoscopic resection, chemotherapy, arterial embolization, and as in our case, radiation therapy.
- Generally, outcomes of patients with metastatic RCC are poor with 5-year survival rates of less than 20%.

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