Metastatic Lesion to the Ampulla Presenting as Acute Anemia

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Introduction

- Metastasis to the ampulla of Vater is extremely rare with only 33 cases reported in the literature.
- Affected patients most commonly present with abdominal pain, jaundice, pruritus and upper GI bleeding.
- We present a case of acute blood loss anemia and melena from metastatic renal cell carcinoma to the ampulla of Vater.

Case Report

- A 77-year-old female with history of stage IIIb, clear-cell renal cell carcinoma status post right nephrectomy and partial left nephrectomy three years previously, complicated by stable metastatic spread to the spine and lungs, actively on pembrolizumab, presented with a week of shortness of breath, fatigue, and dark stools.
- Her hemoglobin was noted to be 5.1, down from a baseline of 11. CT scan of the abdomen revealed stable metastatic disease.
- Esophagogastroduodenoscopy was significant for hematin in the stomach and a large fungating mass with bleeding was found at the ampulla. The gastroscope was subsequently removed and a side viewing scope was then inserted for better visualization of the mass and targeted biopsies.
- In the absence of abdominal pain, cholangitis, and obstructive jaundice, cannulation of the pancreaticobiliary system was not pursued.
- Biopsy results returned positive for renal cell carcinoma.

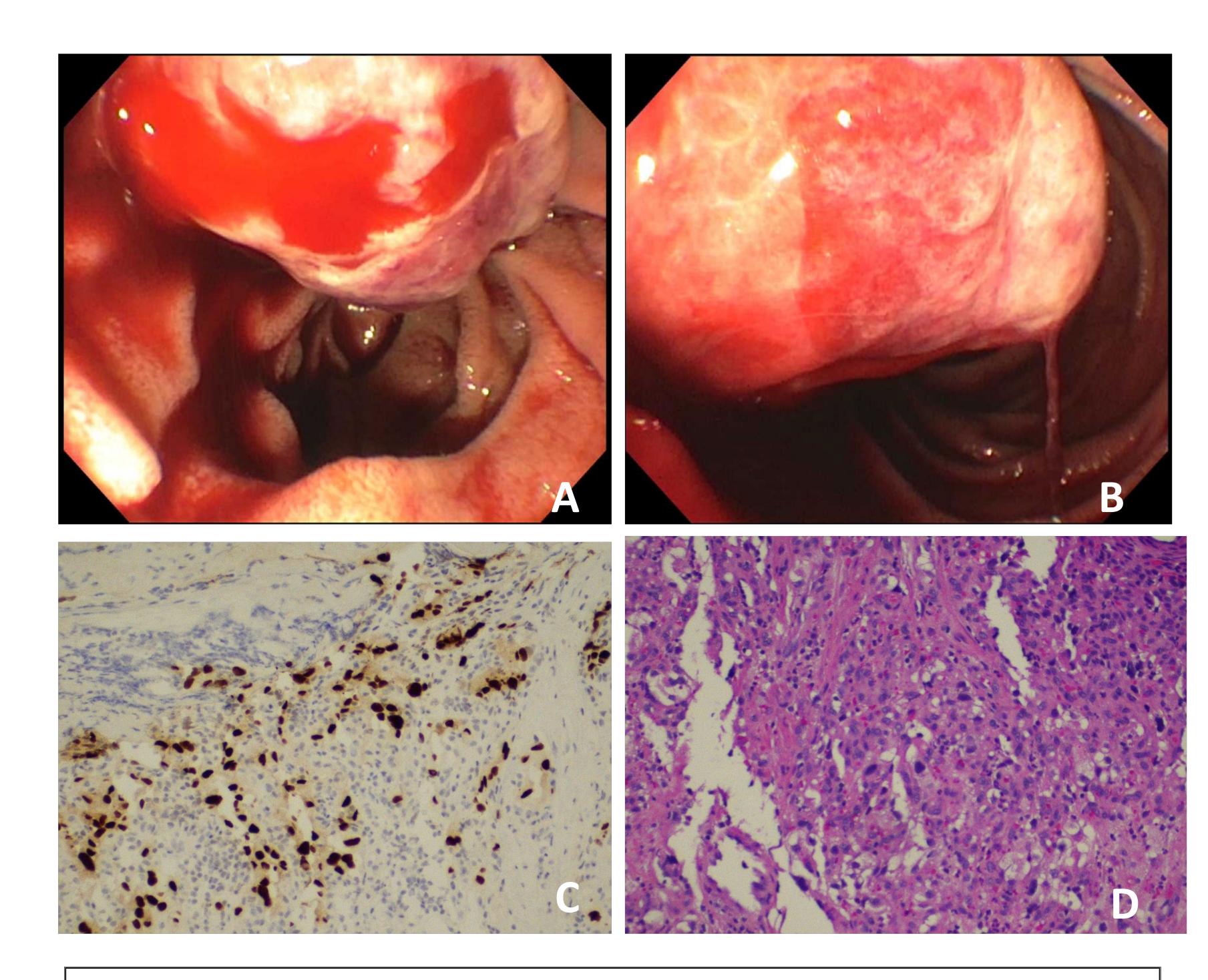


Figure A: Endoscopic view of ampullary mass **Figure B:** Endoscopic view of ampullary mass

Figure C: PAX8 staining positive suggesting renal cell carcinoma

Figure D: H&E staining (200X) Small intestinal mucosa with invasion

References

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Discussion

- As the treatment of cancer rapidly progresses with advances in genetically guided therapeutics as well as immunotherapy, patients presenting with what today is considered a rare complication of metastatic disease will become more common.
- We presented a case of acute blood loss anemia due to metastatic renal cell carcinoma that had spread to the ampulla of the Vater almost 4 years after initial nephrectomy.
- Of the 33 cases of metastatic spread to the ampulla reported in the literature, 39% were renal carcinoma, 30% melanoma, and 12% breast cancer. Bone, ovary, uterus, bladder, and larynx primary cancers have also been reported.
- The time interval between the diagnosis of the primary tumor and ampullary metastasis can be as high as 10 years.
- However, when complete resection of all metastatic lesions is possible, there is improved survival.
- For small lesions, endoscopic ampullectomy is an alternative to Whipple resection and has been shown to reduce length of inpatient stay as well as lower morbidity and mortality.
- Though this technique has yet to be reported for secondary lesions to the ampulla, it should be considered for those presenting with cholangitis or obstructive jaundice.