

Introduction

Appendiceal neoplasms are asymptomatic and non-obstructive that make up ~1% of appendectomy specimens and ~0.5% of intestinal neoplasms. We present an incidental finding of appendiceal neoplasm in a patient with an acute GI bleed.

HPI

A 61-year old male with PUD and diverticulosis on colonoscopy three years ago presented with new onset and acute painless hematochezia within the past 24 hours associated with a 3-month 30-lb weight loss.

VS: T 98.6°F, BP 142/84, HR 72, RR 18, SpO2 of 98% on RA, BMI 30

PE: Mild abdominal distention without tenderness to palpation

Labs:

| | | | | | | |
|--------|------|------|-----|-----|-----|-----|
| 17.2 | 10.9 | 1126 | 135 | 103 | 14 | 228 |
| | 34 | | 4.3 | 25 | 1.0 | |
| MCV 75 | | | | | | |

- hemoglobin and platelet count were both normal 1 year ago.
- Computed tomography of the abdomen and pelvis with contrast revealed a 3.3 x 2.5 cm hyperenhancing mass near the ileocecal valve (Figure 1).
- GI was consulted for a colonoscopy, which showed diverticular bleeding, but no mass. He remained hemodynamically stable and Hematology was consulted.

Hospital Course

A bone marrow biopsy showed hypercellularity with atypia and fibrosis most consistent with myeloproliferative neoplasm. Cytology for JAK-2 V617 mutation was detected and patient was initiated on hydroxyurea to prevent further complications from essential thrombocythemia (ET). Meanwhile, his hemoglobin continued to downtrend presumptively from an acquired von Willebrand syndrome.

Case Conclusion

- Repeat CT scan of the abdomen and pelvis with contrast on hospital day #5 showed no evidence of acute GI bleed but again showed the mass.
- On hospital day #7, the patient had rectal bleeding and a hemoglobin drop to 7.8 dL/mg. On repeat colonoscopy (Figure 3), a mass was discovered intussuscepting in and out of the appendix not previous seen.
- A Iodine-123 Metaiodobenzylguanidine (MIBG) Scan (Figure 2) was positive in the right upper quadrant with elevated chromogranin A level.
- Biopsies revealed a low-grade carcinoid tumor (stage T2N1M0) . He underwent right hemicolectomy once platelets had stabilized as an outpatient.

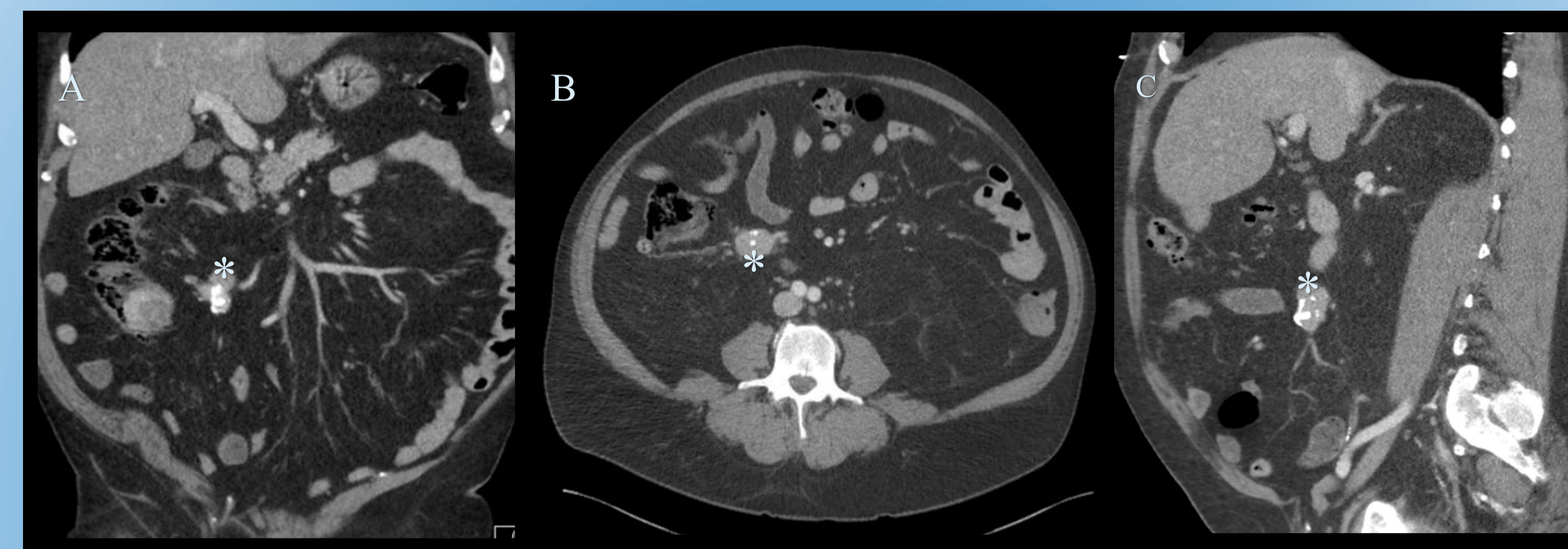


Figure 1. CT Abdomen and Pelvis With Contrast
3.3 x 2.5 cm hyperenhancing mass (*) involving the ileocecal valve seen on 3 views on A, B, and C.

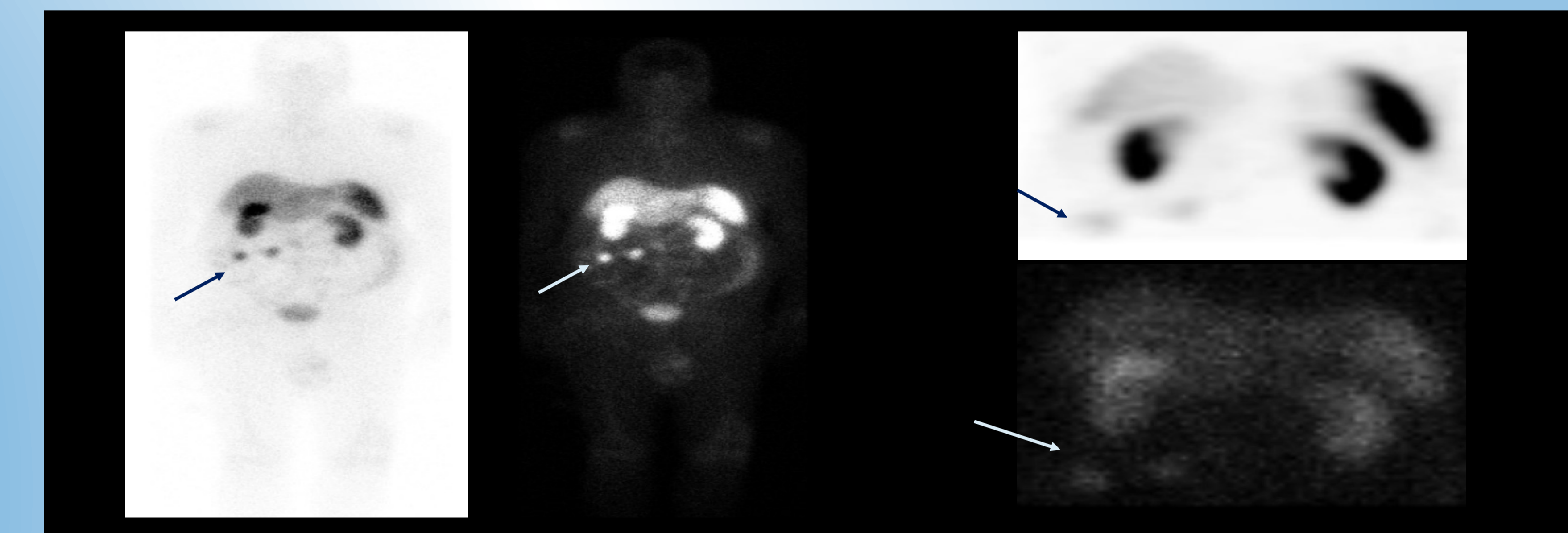


Figure 2. Iodine-123 MIBG Nuclear Medicine Scan
Two rounded abnormal foci (arrows) of radiotracer uptake within the right lower quadrant within the base of the appendix suspicious for NET.

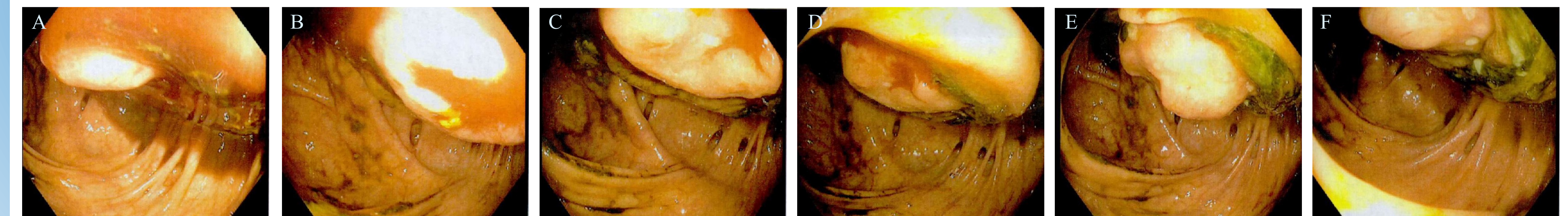


Figure 3. Repeat Colonoscopy
After careful observation of the cecum, a mass inside the appendiceal orifice was seen intussuscepting in and out. A to E shows time lapse of events.

Discussion

Neuroendocrine tumors (NET), also known as carcinoid tumors, are typically detected in the 5th decade of life. Around 1/5th of NETs are found to have an associated non-carcinoid tumor, of which colorectal cancer is 25 to 50% of the cases. The appendix is one of the most common single site for carcinoid tumor; however, in surgical practice, most surgeons may encounter only one of such lesion during their career. Appendiceal carcinoid tumor lacks specific clinical features, and its clinical presentation may not differ from that of acute appendicitis. It is usually diagnosed incidentally during surgery for acute appendicitis and occasionally during other abdominal procedures. In our patient, it was discovered during colonoscopy and serial imaging due to his rectal bleeding. If not for his rectal bleeding, it is likely that his carcinoid tumor could have gone undiagnosed. We hypothesized this was due in part to his bleeding disorder (acquired von Willebrand syndrome), which is very prevalent in those with ET. The patient's coexisting carcinoid tumor and MPN was also of interest since myelodysplastic syndrome could develop in 2% of patients with metastatic NET, who were treated with peptide receptor radionuclide therapy. This is thought to be due to long-term myelotoxicity. Our patient was recommended a right hemicolectomy for the treatment of localized >2 cm appendiceal NET.