A Rare Manifestation of a Tubulovillous Duodenal Polyp Presenting as an Upper Gastrointestinal Hemorrhage

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INTRODUCTION

- Duodenal polyps are a group of polyps that are fairly uncommon to find on endoscopic evaluation (1).
- They are histologically classified according to mucin phenotype into intestinal and gastric subtypes; the intestinal-type polyps are morphologically subdivided into tubular and tubulovillous adenomas (2).
- We present a case of a 76-year-old male with recurrent hematemesis who was found to have an intestinal-type pedunculated Tubulovillous adenoma (TVA) in the descending duodenum.
- An isolated occurrence of non-ampullary sporadic duodenal adenomas (SDA’s) are a rare finding and presentation as an upper GI hemorrhage is extremely uncommon (3).
- Furthermore, our patient’s polyp was pedunculated which is atypical because most SDA’s are morphologically flat or sessile (4).
- The purpose of this case is to present a rare cause of upper gastrointestinal bleeding and to depict characteristics of an isolated duodenal TVA and its treatment options.

CASE REPORT

History of Present Illness:

- 76-year-old male from a long-term care facility presented for feeling “off” and having increased respiratory secretions.
- He also complained of coughing, wheezing, and dyspnea.

Physical Exam:

- On physical exam, he appeared frail, his abdomen was soft, non-tender, and with normal bowel sounds, he also had marked basilar rhonchi on auscultation of chest.

Hospital Course:

- He was initially placed on bilevel positive airway pressure, however, his mental status continued to decline and he required intubation for acute hypoxic respiratory failure secondary to bacterial pneumonia and a CHF exacerbation, which was treated with IV diuretics and antibiotics.
- Gastroenterology was initially consulted for coffee ground hematemesis with a hemoglobin of 9.9 g/dL (baseline).
- There was no endoscopic intervention done at this time because he was hemodynamically stable.
- His hematemesis was thought to be secondary to apixaban and aspirin for CAD and PAF and thus his apixaban was stopped.
- Gastroenterology was re-consulted when the patient’s hemoglobin decreased to 6.6 g/dL and orogastric lavage revealed 1L of coffee-ground material.
- At that time, the patient underwent an emergent esophagogastroduodenoscopy (EGD) which revealed a 10mm pedunculated polyp in the proximal duodenum with active bleeding (Figures 1-2).
- The polyp was resected with hot snare and clamped twice (Figure 3).

After EGD, the patient’s hematemesis resolved and his hemoglobin stabilized back to baseline.
- However, his CHF and pneumonia progressed and worsened his respiratory failure, so his family opted for comfort measures and the patient died.

Pathology:

- Figures 4-6: Biopsy of polyp tissue revealed a tubulovillous adenoma with minute foci of high grade dysplasia.

DISCUSSION

- Our patient had a pedunculated, intestinal-type, tubulovillous adenoma, which is a rare phenomenon.
- Non-ampullary sporadic duodenal adenomas are those which arise in patients without a known polyposis syndrome, such as Familial Adenomatous Polyposis or Gardner’s syndrome (4).
- Most patients are asymptomatic and very few present primarily with a upper GI hemorrhage, as seen in this case.
- The risk of carcinoma is greater in ampullary adenomas and increases with the size of adenoma (4).
- EGD techniques that are currently used for treatment include endoscopic snare and electrosantery, which was successful in this case as the patient’s hematemesis resolved.

CONCLUSION

- Duodenal polyps are a rare occurrence and most are, but pedunculated polyps should be resected and biopsied.
- EGD surveillance within 1-6 months is recommended as non ampullary sporadic adenomas have been linked to an increased risk of colorectal neoplasia (4).
- It is also important for practitioners to keep in mind rarer causes of upper GI bleeding.

REFERENCES