

A Rare Case Of Duodenal Leiomyoma

GOWTHAMI RAMAR MD, MINHAZ AHMAD MD, NAZIF CHOWDHURY MD
United Health Services- Wilson Medical Center, Johnson City, New York.



Introduction:

Neoplasms of the small bowel are rare and comprise only 1-5% of all gastrointestinal neoplasms. Adenocarcinomas, lymphomas, and neuroendocrine tumors are the most common malignant tumors seen in the small intestine, while gastrointestinal stromal tumors, leiomyosarcomas, and leiomyomas are uncommon. The Jejunum is the most common and the duodenum, is the least common location for leiomyomas. We are presenting a rare case of a female with duodenal leiomyoma.

Case Description:

A 70-year-old female presented to the hospital with complaints of fatigue and weakness. Laboratory evaluation showed iron deficiency anemia with hemoglobin 7.5g/dl, and hematocrit 25.4%. The patient does report an episode of black tarry stool about a week before the presentation. The patient received one packed red blood cell transfusion and the decision was made to perform upper gastrointestinal endoscopy (EGD) to evaluate anemia. EGD revealed a single large pedunculate polyp in the first portion of the duodenum extending into the second portion of the duodenum (Fig.1). Biopsy from the polyp revealed submucosal leiomyoma (Fig.2) without any evidence of dysplasia or malignancy. A colonoscopy was performed the next day which revealed significant diverticulosis and non-bleeding internal hemorrhoids. The patient improved clinically and was discharged home the next day. The patient presented about a month later with iron deficiency anemia again. Repeat EGD and colonoscopy performed this time showed no obvious source of bleeding. We also conducted a pill cam study, which also came back negative for bleeding.

Discussion:

It is unusual for leiomyomas, which are benign smooth muscle tumors, to develop in the gastrointestinal tract. Males are more likely than females to be diagnosed with duodenal leiomyomas in the 6th and 7th decades of life. The origin and pathology of these tumors in the gastrointestinal tract remain a mystery. Leiomyomas of the duodenum seldom cause symptoms. When a duodenal tumor is larger, it might cause more severe symptoms, such as bleeding, nausea, vomiting, and weakness. In our patient described above, we believe the leiomyoma caused bleeding, as no other definitive source of bleeding was found even after a complete evaluation. The case describes a rare duodenal tumor with an unusual presentation.



Fig.1: EGD showing a large polyp extending from the first portion to the second portion of the duodenum.

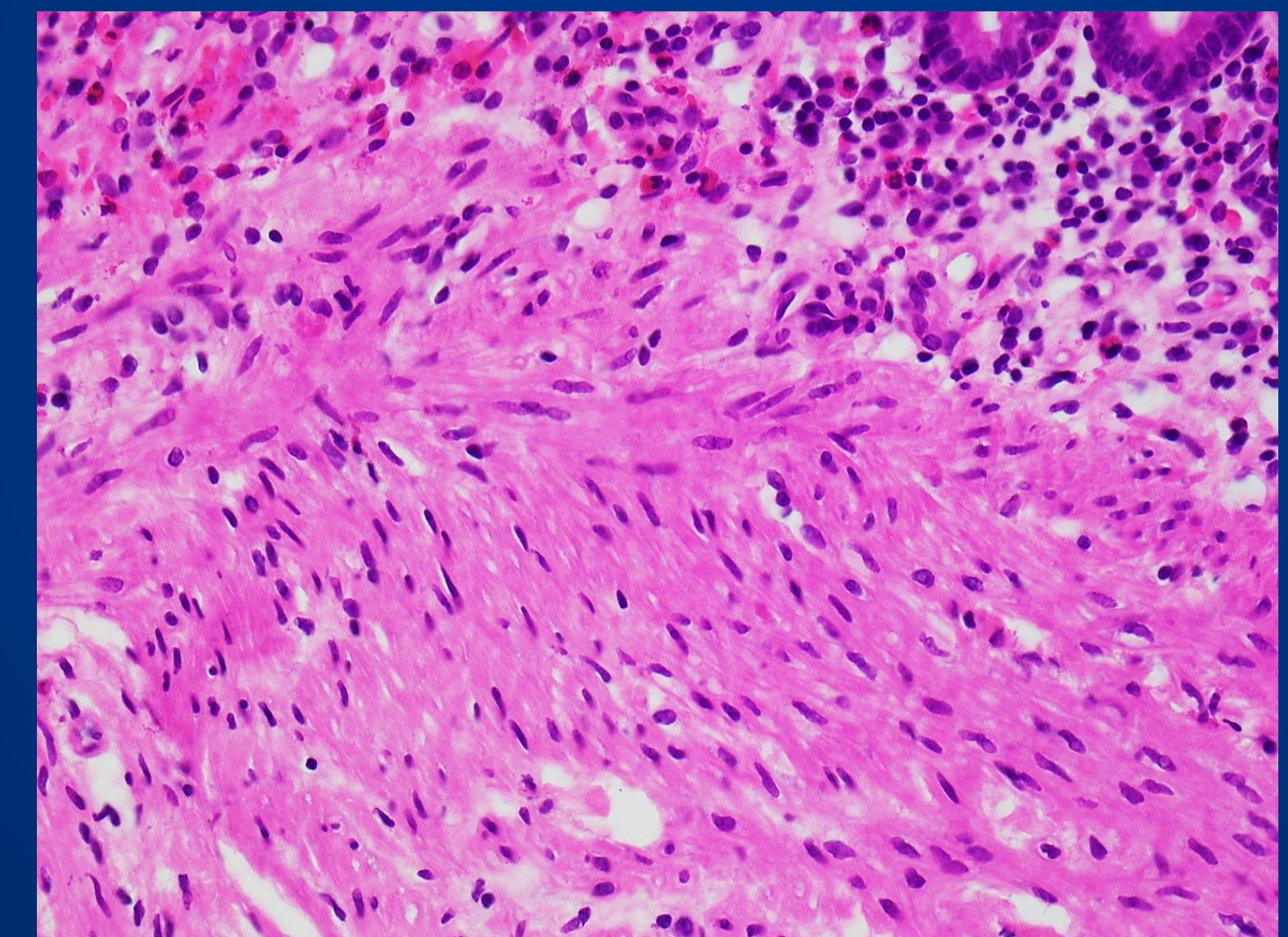


Fig.2: H&E demonstrating submucosal benign spindle cell proliferation Composed of bland elongated nuclei with abundant eosinophilic cytoplasm.

References:

1. Wroński K, Kaczor J, Masłowski Z. Duodenalis leiomyoma – egy ritka betegség esettanulmánya [Duodenal leiomyoma - a rare case report]. *Magy Seb.* 2017 Sep;70(3):232-234. Hungarian. doi: 10.1556/1046.70.2017.3.3. PMID: 28876117
2. Morgan BK, Compton C, Talbert M, Gallagher WJ, Wood WC. Benign smooth muscle tumors of the gastrointestinal tract. A 24-year experience. *Ann Surg.* 1990 Jan;211(1):63-6. doi: 10.1097/0000658-199001000-00011. PMID: 2294846; PMCID: PMC1357895