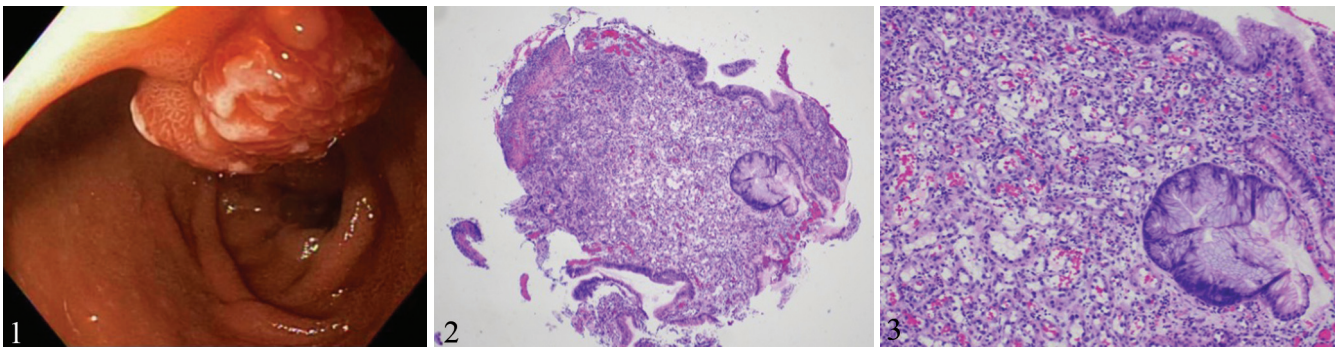


Duodenal Hemangioma: A Rare Cause of Iron Deficiency Anemia

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Hemangioma refers to a benign vascular lesion, often localized to the skin and oral mucosa [1]. Few cases within the gastrointestinal tract have been reported, those of which were localized to the esophagus and colon [2]. Involvement of the duodenum has been documented in few instances as an unusual case of anemia and gastrointestinal bleeding [3].

We report a case of a 69-year-old male who presented to outpatient gastroenterology for moderate iron deficiency anemia (IDA) evaluation. He reported generalized weakness and fatigue. He denied melena, hematemesis, or hematochezia. Upper gastrointestinal endoscopy depicted a 15 mm duodenal polypoid lesion in the duodenal bulb (Fig. 1). Histopathology examination, hematoxylin and eosin staining, was consistent with a mucosal lobular capillary hemangioma showing a lamina propria based proliferation of capillaries with overlying granulation tissue (Fig. 2, 20x and Fig. 3, 100x). He was started on iron supplementation and underwent endoscopic mucosal resection with hemangioma removal. His evolution was favorable.

These lesions are commonly referred to as lobular capillary hemangiomas based on the lobular arrangement of capillaries at their base. They are characterized by rapid growth, a friable surface, and non-specific changes including capillary dilation, stromal edema, ulceration, inflammation, and granulation tissue. Clusters of endothelial cells form these lobules, with the capillary lumina varying in size [4]. While their etiology remains unknown, predisposing factors include hormonal imbalances, infection, and tissue trauma [5]. Clinically, these lesions pose a minor risk of bleeding. Patients may present with asymptomatic anemia or overt signs of bleeding. Although

capillary hemangiomas of the gastrointestinal tract are rarely reported, incidence is likely much higher [6]. Lesions are often unrecognized or misdiagnosed due to their unusual endoscopic appearance. These polyps should be resected due to risk of anemia and bleeding.

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REFERENCES

1. Lin RL, Janniger CK. Pyogenic granuloma. *Cutis* 2004;74:229-233.
2. Korc P, McHenry L. An uncommon cause of chronic upper GI bleeding. *Gastrointest Endosc* 2016;84:524. doi:[10.1016/j.gie.2016.03.1483](https://doi.org/10.1016/j.gie.2016.03.1483)
3. Amiama Roig C, Zarauza Soto Y, Marín Serrano E, Martín Arranz E, Fernández Martos R. Duodenal pyogenic granuloma: An unusual cause of chronic anemia. *Rev Esp Enferm Dig* 2023;115:530-531. doi:[10.17235/reed.2022.9411/2022](https://doi.org/10.17235/reed.2022.9411/2022)
4. Mills SE, Cooper PH, Fechner RE. Lobular capillary hemangioma: the underlying lesion of pyogenic granuloma. A study of 73 cases from the oral and nasal mucous membranes. *Am J Surg Pathol* 1980;4:470-479.
5. Mandaliya R, Han S, Haddad N. Bleeding pyogenic granuloma of the ampulla of Vater: a rare cause of severe chronic anemia. *Gastrointest Endosc* 2019;89:1066-1067. doi:[10.1016/j.gie.2019.01.010](https://doi.org/10.1016/j.gie.2019.01.010)
6. Val-Bernal JF, Mayorga M, Cagigal ML, Cabezas-González J. Gastric pyogenic granuloma: Report of two cases and review of the literature. *Pathol Res Pract* 2016;212:68-71. doi:[10.1016/j.prp.2015.11.001](https://doi.org/10.1016/j.prp.2015.11.001)