

PICTURES IN DIGESTIVE PATHOLOGY

Ulcerated submucosal gastric tumor. Could it be a benign condition?

Enrique Rodríguez-de-Santiago¹, Celia Zaera-de-la-Fuente¹, Beatriz Peñas-García^{1,3}, Ana María Gutiérrez-Pecharromán², José Luis Cuño-Roldán¹, Carlos Arocena-Aranguren¹, Víctor Defarges-Pons¹, Lara Aguilera-Castro¹, Daniel Boixeda-de-Miquel^{1,3} and Agustín Albillos-Martínez^{1,3}

Departments of ¹Gastroenterology and Hepatology, and ²Pathology. Hospital Universitario Ramón y Cajal. Madrid, Spain. ³Universidad de Alcalá. IRICYS. Madrid, Spain

CASE REPORT

A 68-year-old female patient with an unremarkable past medical history presented to our Gastroenterology Department with a one month history of symptomatic anemia (hemoglobin: 4.5 g/dL) and intermittent episodes of melena without hemodynamic compromise. Esophago-gastroduodenoscopy found an ulcerated mass of probable submucosal origin located in the prepiloric region (Fig. 1). Biopsies were compatible with granulation tissue. A subsequent endoscopic ultrasound (EUS) identified a 3.6-cm subepithelial, hypoechoic and homogenous lesion; calcification or necrotic areas were absent (Fig. 2). A CT scan revealed no distant disease (Fig. 3). The suspected diagnosis was a gastrointestinal stromal tumor (GIST); antrectomy with Roux-en-Y reconstruction was performed. Pathologic examination revealed an antral submucosal highly vascularized tumor constituted by a solid proliferation of spindle cells without atypia and eosinophil-predominant inflammation (Fig. 4A). Immunohistochemical staining exhibited strong positivity for vimentin and CD34, mild for actin and patchy for CD-117 and bcl-2, consistent with the diagnosis of an inflammatory fibroid polyp (IFP) (Fig. 4B). The postoperative period was uneventful and the patient is currently asymptomatic.

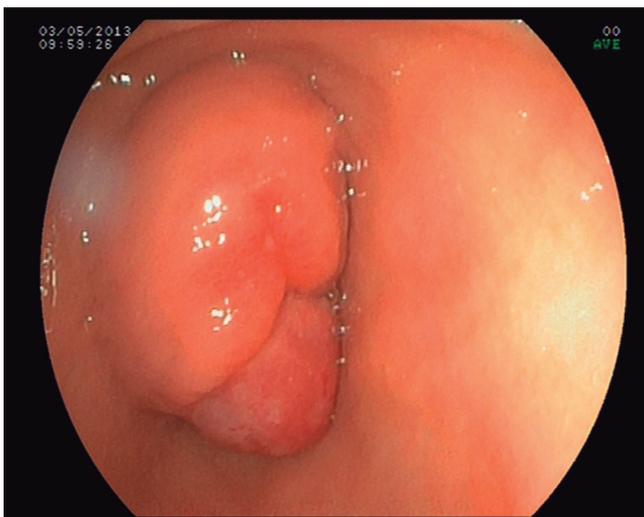


Fig. 1. Ulcerated submucosal prepiloric lesion.

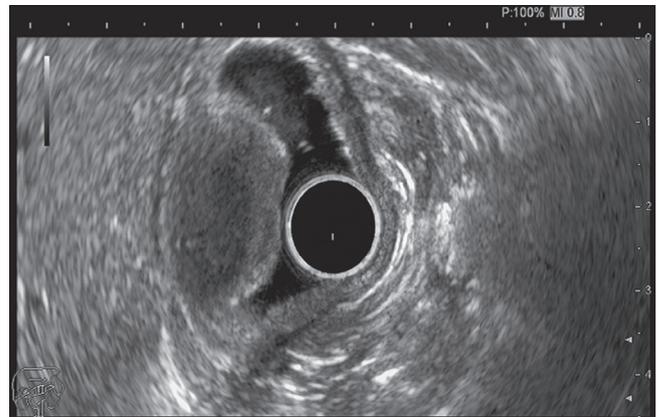


Fig. 2. Hypoechoic, 3.6-cm subepithelial and homogenous lesion. Calcification or necrotic areas were absent.

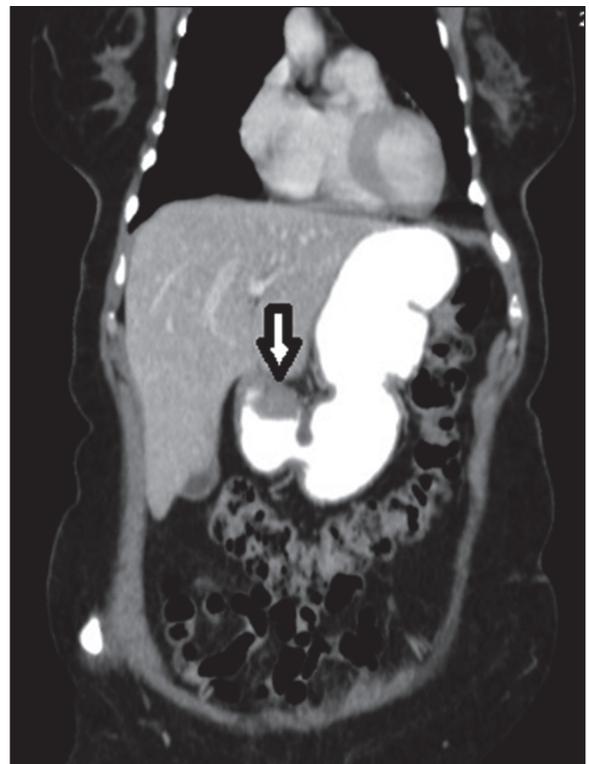


Fig. 3. CT scan. Oral contrast inside the stomach.

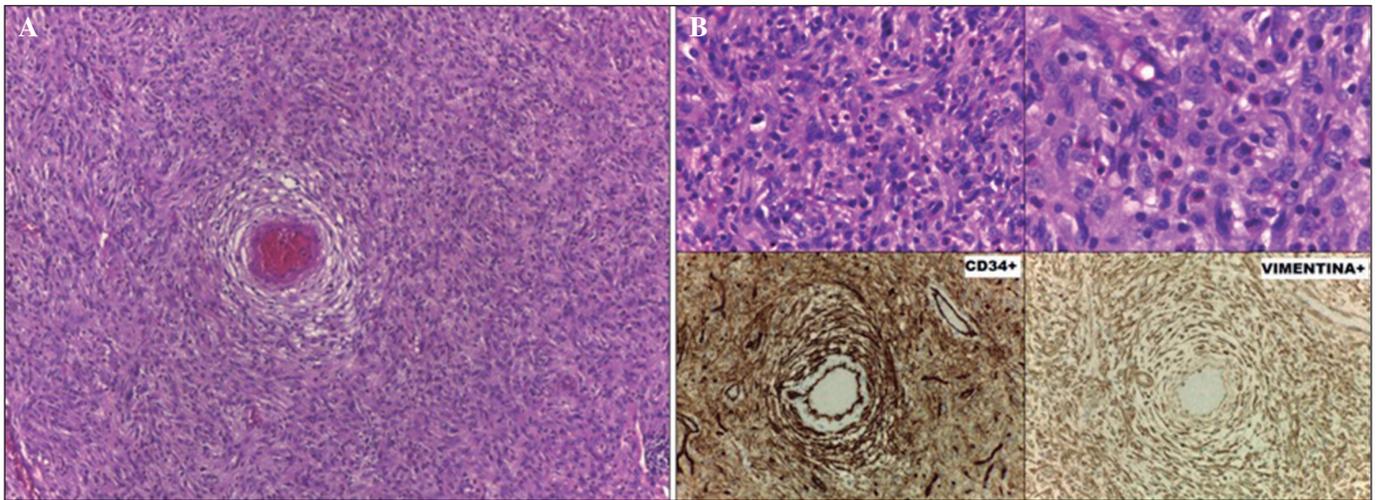


Fig. 4. A. Histopathology. Dense population of cells arranged into small bundles or swirls, which sometimes acquired an onion layers appearance around capillaries. Eosinophilic infiltrate is common. B. Atypia was absent. Cells acquire a fusiform shape with oval nuclei, fine chromatin and small nucleolus. Immunohistochemistry: CD34 +, vimentine +.

DISCUSSION

First described in 1949 (1), IFP has also been named eosinophilic granuloma, inflammatory pseudotumor or Vanek's polyp. It is a rare benign submucosal tumor that can appear anywhere in the digestive tract, including the cecal appendix (2). It may be asymptomatic or present with gastrointestinal bleeding, iron deficiency anemia, dyspepsia or intussusception (3). The differential diagnosis includes carcinoids, GISTs, lipomas, leiomyomas, gastric adenocarcinomas, adenomas, neurofibromas, schwannomas and eosinophilic gastroenteritis. They are usually semi-pedunculated and covered with normal mucosa, but when the size exceeds one centimeter they can ulcerate and become indistinguishable from malignant tumors (4). EUS commonly shows an ill-defined, hypoechoic, homogeneous lesion which originates from the 2nd or 3rd layer of the gastric wall (5). Histopathological examination with

immunohistochemistry is required for a definitive diagnosis. The classical treatment is surgery; however, endoscopic resection may be curative. Prognosis is excellent.

REFERENCES

1. Vanek J. Gastric submucosal granuloma with eosinophilic infiltration. *Am J Pathol* 1949;25:397-411.
2. Liu TC, Lin MT, Montgomery EA, et al. Inflammatory fibroid polyps of the gastrointestinal tract: Spectrum of clinical, morphologic, and immunohistochemistry features. *Am J Surg Pathol* 2013;37:586-92. DOI: 10.1097/PAS.0b013e31827ae11e
3. Matsushita M, Hajiro K, Okazaki K, et al. Endoscopic features of gastric inflammatory fibroid polyps. *Am J Gastroenterol* 1996;91:1595-8.
4. Matsushita M, Hajiro K, Okazaki K, et al. Gastric inflammatory fibroid polyps: Endoscopic ultrasonographic analysis in comparison with the histology. *Gastrointest Endosc* 1997;46:53-7. DOI: 10.1016/S0016-5107(97)70210-4
5. Tada S, Iida M, Yao T, et al. Endoscopic removal of inflammatory fibroid polyps of the stomach. *Am J Gastroenterol* 1991;86:1247-50.