Endoscopic characterization and resection of Vanek’s tumor of the duodenum

A 66-year-old white man was referred following visualization of a duodenal mass on endoscopy. The patient had presented to his primary physician complaining of a 6-week history of nausea, vomiting, 20-pound unintentional weight loss, and melena. Initial physical exam revealed diffuse abdominal pain. Laboratory work-up revealed normocytic-normochromic anemia (Hb 9.4 g/dL), abdominal ultrasound showed a distended gallbladder, and abdominal computed tomography scan findings were negative. Esophagogastroduodenoscopy (EGD) revealed a pedunculated polypoid lesion (2×2 cm) in the duodenum. The lesion was injected with epinephrine 1:10 000, and pedunculated. On endosonography there were no signs of muscular involvement.

On endoscopy, a pedunculated, ulcerated, polypoid lesion was located between the first and second duodenum. The base of the lesion was long, soft, and pedunculated. On endosonography there were no signs of muscular involvement. A marked increase in acute and chronic inflammatory cells, particularly eosinophilic infiltration, was also observed. This eosinophilic infiltrate intermixed with intermingled fibrous and adipose tissue, was characteristic of IFP (Vanek’s tumor).

Repeat EGD revealed a superficially ulcerated semipedunculated lesion (Fig. 1a). The lesion was resected using advanced resection techniques, and the defect was closed using two clips. Key steps in the resection were creation of an adequate submucosal cushion, lifting of the lesion, incising around the base using endoscopic submucosal dissection techniques, and performing endoscopic mucosal resection. Histopathology revealed an inflammatory fibroid polyp (IFP), or Vanek’s tumor, with free margins (R0) (Fig. 1b-d). The patient had a satisfactory postoperative course, and remained asymptomatic at the 6-month follow-up.

This case is of interest for several reasons. First, it demonstrates IFP in the duodenum, which is rare. IFPs are rare submucosal lesions arising from a reactive, benign, granuloma-like process of the gastrointestinal tract [1, 2]. Common locations include the stomach (70%), ileum (19%), and colon (6%) [3, 4], but occurrence in the duodenum is rare [3, 4]. Second, a detailed endoscopic image of this tumor was obtained. Most previous publications lack endoscopic documentation. IFPs are semipendunculated or sessile lesions covered by normal mucosa with occasional superficial ulceration, and measure 2–5 cm in diameter [4, 5]. Microscopically, they contain spindle cells, vascular and fibroblastic proliferation, with eosinophilic infiltration. Immunohistochemistry distinguishes them from gastrointestinal stromal tumors, as IFPs are CD-34 and vimentin positive but CD-117 negative. Finally, endoscopic resection was demonstrated to be effective in removing the IFP. However, larger lesions should be removed surgically.

In summary, this case demonstrated the endoscopic and histologic characteristics of duodenal IFP, and showed that endoscopic resection solves the partial gastric outlet obstruction and gastrointestinal bleeding.

Endoscopy_UCTN_Code_CCL_1AB_2AZ_3AB

Competing interests: None

Paul T. Kröner1, Leona Council2, Klaus Mönkemüller3

1 Department of Internal Medicine, Mount Sinai St. Luke’s Roosevelt Hospital Center, New York, New York, United States
2 Department of Pathology, University of Alabama at Birmingham, Birmingham, Alabama, United States
3 Basil I. Hirschowitz Endoscopic Center of Excellence, Division of Gastroenterology and Hepatology, University of Alabama at Birmingham, Birmingham, Alabama, United States

References
3 Shimura T, Kataoka H, Sasaki M et al. Rectal inflammatory fibroid polyp resected with

4 Akbulut S. Intussusception due to inflammatory fibroid polyp: a case report and comprehensive literature review. World J Gastroenterol 2012; 18: 5745–5752


Bibliography

DOI http://dx.doi.org/10.1055/s-0034-1392595
Endoscopy 2015; 47: E408–E409
© Georg Thieme Verlag KG
Stuttgart · New York
ISSN 0013-726X

Corresponding author
Paul T. Kröner, MD
Department of Internal Medicine
Mount Sinai St. Luke’s/Roosevelt Hospital Center
515 W 59th Street Apt. 15R
New York City
NY, 10019
USA
Fax: +1-212-523-4000
PFlorit@chpnet.org