

LETTERS TO THE EDITOR EDİTÖRE MEKTUPLAR

Duodenal stromal tumor: A rare and overlooked cause of massive gastrointestinal bleeding

Duodenal stromal tümör: Nadir ve gözden kaçan masif bir gastrointestinal kanama nedeni

To the Editor,

A 56-year-old male patient was admitted to the Emergency Department of our hospital with the complaint of melena lasting for eight days. Before admission, he had been hospitalized for three days in a local state hospital. His initial hemoglobin was 4 g/dl at that hospital with the presence of hypotension, and he had received 7 units of packed red blood cells. Esophagogastroduodenoscopy was performed within 24 hours of admission to our hospital and showed fresh red blood in the second part of the duodenum, and a bleeding ulcerative mass 4 cm in diameter was found in the third part of the duodenum as the endoscope was moved further. No biopsies were taken and the patient underwent surgery soon after this endoscopy for curative reasons, also considering that the patient

had experienced hypotension due to this mass. Following duodenotomy, the mass was totally excised by wedge resection (Figure 1).

Macroscopic examination revealed a solitary, well-circumscribed and lobulated mass 4x5 cm in diameter arising from the submucosa of the duodenum. Histologically, the tumor was composed of spindle and epithelioid cells. The cells were separated by fibrous bands. Immunohistochemical staining revealed positive staining for CD117 (strongly) (Figure 2), CD34 and S100 (focal). The case was diagnosed as gastrointestinal stromal tumor (GIST).

GIST is a relatively newly discovered and defined clinical and pathological entity (1). Normally, gas-

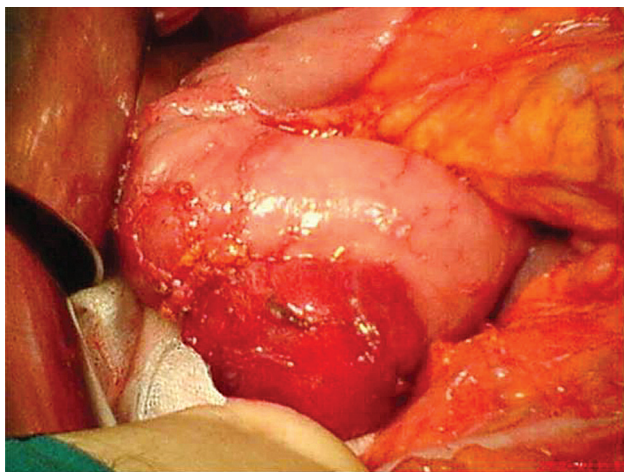


Figure 1. Lobulated mass 4x5 cm in diameter arising from the submucosa of the duodenum.

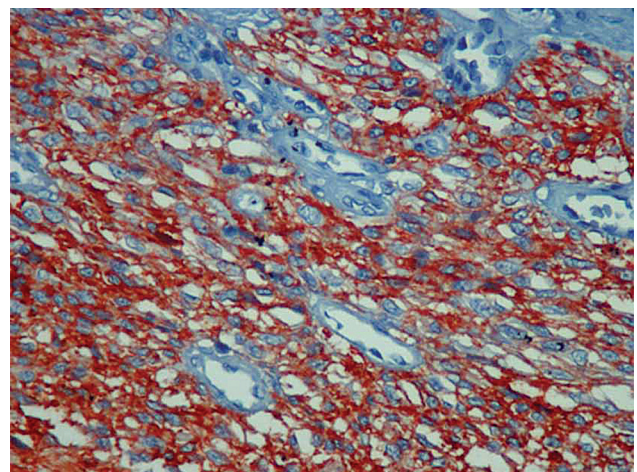


Figure 2. Tumoral cells stained positively with CD 117 (IHK X50).

Address for correspondence: Özlem YÖNEM
Cumhuriyet Üniversitesi Tıp Fakültesi
Gastroenteroloji Bilim Dalı, Sivas, Turkey
Phone: + 90 346 258 09 43
E-mail: oyonem@cumhuriyet.edu.tr

Manuscript received: 01.08.2007 **Accepted:** 07.01.2009

gastrointestinal bleeding secondary to small bowel tumors arises in a progressive process, leading to chronic anemia and diagnostic difficulties (2). Presentation of a GIST as acute bleeding is rare, and the third part of the duodenum is not routinely investigated while performing upper endoscopy to ascertain the bleeding source.

Duodenal stromal tumors most commonly arise in the second part of the duodenum and about half of them are malignant. On presentation, 41%-47% of malignant GISTs are metastatic (3). These tumors grow expansively without being invasive and sometimes metastasize to the liver or recur locally (4). The most suitable treatment for duodenal

GISTs is total surgical resection (5). However, surgical management of duodenal tumors is difficult because of the complex anatomical relationships around the duodenum. In cases of unresectable or metastatic GIST, imatinib mesylate, which is a powerful and selective inhibitor of tyrosine kinase KIT and PDGFR α receptors, can be used (5). As the tumor of our patient was not that large (4 cm) and his ampulla of Vater was preserved, wedge resection of the tumor was sufficient, leaving intact margins, and no additional treatment was planned. In conclusion, duodenal GIST in the third part of the duodenum and its presentation as massive bleeding are extremely rare.

REFERENCES

1. Tryggvason G, Kristmundsson T, Orvar K, et al. Clinical study on gastrointestinal stromal tumors (GIST) in Iceland, 1990-2003. *Dig Dis Sci* 2007; 52: 2449-53. Epub 2007 Apr 10.
2. Parreira JG, de Freitas W, Rasslan S. Upper gastrointestinal hemorrhage due to duodenal stromal tumor. *Arq Gastroenterol* 2003; 40: 188-91.
3. Yıldırğan MI, Başoğlu M, Atamanalp SS, et al. Duodenal stromal tumor: report of a case. *Surg Today* 2007; 37: 426-9.
4. Goh BK, Chow PK, Ong HS, et al. Gastrointestinal stromal tumor involving the second and third portion of the duodenum: treatment by partial duodenectomy and Roux-en-Y duodenojejunostomy. *J Surg Oncol* 2005; 91: 273-5.
5. Fernandez Salazar LI, Alvarez Gago T, Sanz Rubiales A, et al. Gastrointestinal stromal tumors (GISTs): clinical aspects. *Rev Esp Enferm Dig* 2007; 99: 19-24.

Yüksel SEÇKİN¹, Ayhan KOYUNCU²,
Özlem YÖNEM¹, D. Sema ARICI³,
Abdülkerim YILMAZ¹, Cengiz AYDIN²

Departments of ¹Gastroenterology, ²Surgery and ³Pathology,
Cumhuriyet University, School of Medicine, Sivas

Carcinoid tumor within Meckel's diverticulum causing gastrointestinal bleeding

Meckel divertikülünde gastrointestinal kanamaya neden olan karsinoid tümör

To the Editor,

The most common complications of Meckel's diverticulum, which affects approximately 2% of the general population, are bleeding, intestinal obstruction and diverticulitis (1). Bleeding is usually the result of ileal mucosal ulceration that occurs due

to acid producing, heterotopic gastric mucosa located within the diverticulum (1). Another possible cause of mucosal ulceration is carcinoid tumor (well-differentiated neuroendocrine tumor), which is also a rare clinical entity (2). Hence, a carcinoid

Address for correspondence: Ersin ÖZTÜRK
Uludağ Üniversitesi Tıp Fakültesi
Genel Cerrahi Anabilim Dalı, 16059 Görükle, Bursa, Turkey
Phone: + 90 224 295 20 21
E-mail: drozturk@uludag.edu.tr

Manuscript received: 10.01.2008 **Accepted:** 17.10.2008