

Segmental ileal resection and end-to-end anastomosis was performed. On the sixth day of admission she was discharged uneventfully.

Primary small bowel volvulus (SBV) occurs in the absence of anatomic abnormalities or predisposing factors. Although very rare in USA and Western Europe, the incidence is 5-10 times higher in Africa, Asia, and Middle East. It is thought to be related to different dietary habits such as ingestion of large volumes of fiber-rich foods after long intervals of fasting (1,2).

Secondary SBV occurs generally in the presence of predisposing factors such as anatomic disorders, malrotations, or postoperative adhesive bands. Post-operative adhesive bands are major problems for all surgeons due to their morbidity (1-3).

Post operative adhesive small bowel obstruction is a rare but documented complication of appendectomy. The frequency of this condition has been reported between 0,2 % and 10,7 % (4). Due to its rarity, long-term severe complications of appendectomy are generally neglected.

Abdominal CT has been shown to be effective for the diagnosis of strangulation of the affected bowel with a high specificity and sensitivity of 93% and 83% respectively (5). When the characteristic "whirl sign" is seen on CT scan, SBV should be suspected (5,6). SBV is an extremely rare but potentially fatal condition that should be kept in mind in all patients with severe abdominal pain. Previous abdominal operations are thought to be an etiologic factor of SBV.

REFERENCES

1. Roggo A, Ottinger WL. Acute small bowel volvulus in adults. *Ann Surg* 1992;216:135-41.
2. Tahrán ÖR, Barut İ, Çerçi C. An interesting coexistence: Small bowel volvulus and small bowel diverticulosis. *Türk J Gastroenterol* 2006;17:300-4.
3. Shams M, Farrag S, Gamal M. Post appendectomy adhesive small intestinal obstruction, is conservative treatment of value. *Egypt J Surg* 2007;26:81-5.
4. McCoubrey AS, Thompson RLE. Small bowel volvulus secondary to a mesenteric lipoma: a case report and review of the literature. *Ir J Med Sci* 2006;175:79-80.
5. Korte N, Grutters CT, Snellen JP. Small bowel volvulus diagnosed by the CT "Whirl Sign". *J Gastrointest Surg* 2008;12:1469-70.
6. Katis PG, Dias SM. Volvulus: a rare twist on small-bowel obstruction. *CMAJ* 2004;171:728.

Zülfikar KARABULUT, Paşa DOĞAN

Department of General Surgery, Başkent University Hospital, Antalya

A duodenal mass and acute pancreatitis

Duodenal kitle ve akut pankreatit

To the Editor,

Eosinophilic gastroenteritis (EGE) is a rare condition, first described in 1937 by Kaijser *et al.* It is defined as a disorder primarily affecting the gastrointestinal tract with eosinophil-rich inflammation, in the absence of known causes of eosinophilia (e.g. drug reactions, parasitic infections, or malignancy) (1). Three different forms of EGE can be distinguished: mucosal disease, muscle layer di-

sease, and subserosal disease. The symptoms of EGE are related to the layer involved. Mucosal disease is the most common form and presents with nonspecific symptoms such as abdominal pain, nausea, vomiting, diarrhea, or malabsorption. The second form, muscle layer disease, is a more serious form that presents with symptoms due to intestinal obstruction. The third form, subserosal di-

Address for correspondence: Özlem ÖZER ÇAKIR
Selcuk University, Meram School of Medicine, Department of
Gastroenterology and Hepatology, Konya, Turkey
E-mail: tansozlem@yahoo.com

Manuscript received: 12.01.2012 **Accepted:** 13.03.2012

doi: 10.4318/tjg.2013.0503

sease, is uncommon and presents with ascites. The incidence of EGE in the USA is approximately 2,5 per 100.000 adults (2,3).

A 56-year-old man was admitted with a history of abdominal pain, nausea, and vomiting for 3 months. He had experienced postprandial fullness for the past month and lost 6 kg in weight. He had no prior history of drug use. He had no history of food allergies. His clinical examination was remarkable for abdominal distension and mild upper abdominal tenderness with palpation. Laboratory tests on admission revealed a WBC count of $21780/\text{mm}^3$ with an eosinophil count of 0.8% (normal 0.5%-6%). Serum amylase was 757 U/L (normal 28-100 U/L) and serum lipase was 386 U/L (normal 22-51 U/L). Serum IgE level was 650 U/L (normal < 140 U/L). Other laboratory tests including liver function tests, routine stool studies, serum lipid profile, and serum immunoglobulins, were normal. An ultrasound and CT scan of the abdomen revealed a dilated stomach with retained

food and mild thickening of the duodenal folds. The pancreas was normal, and there were no gallstones. The patient was treated conservatively with rehydration and nasogastric suction. EGD showed ulcers and thickened duodenal folds with duodenal narrowing. Multiple 2-6 mm ulcerated nodules were noted in the duodenum, with thickening of the duodenal folds extending into the second part of the duodenum (Figure 1 A, B). Biopsies of the duodenum showed chronic duodenitis with intense eosinophilic infiltration of the lamina propria and muscularis mucosa (Figure 2 A, B). The patient was treated with steroids, and his symptoms of duodenal obstruction resolved.

In EGE, eosinophilia is present in 80% of cases. Further investigations should include endoscopy for mucosal biopsy. To confirm the diagnosis of EGE, other causes leading to eosinophilic infiltration of the bowel must be ruled out, such as food allergy, drug idiosyncrasies, parasitic / helminthic infestation, connective tissue disorders, vasculitis,

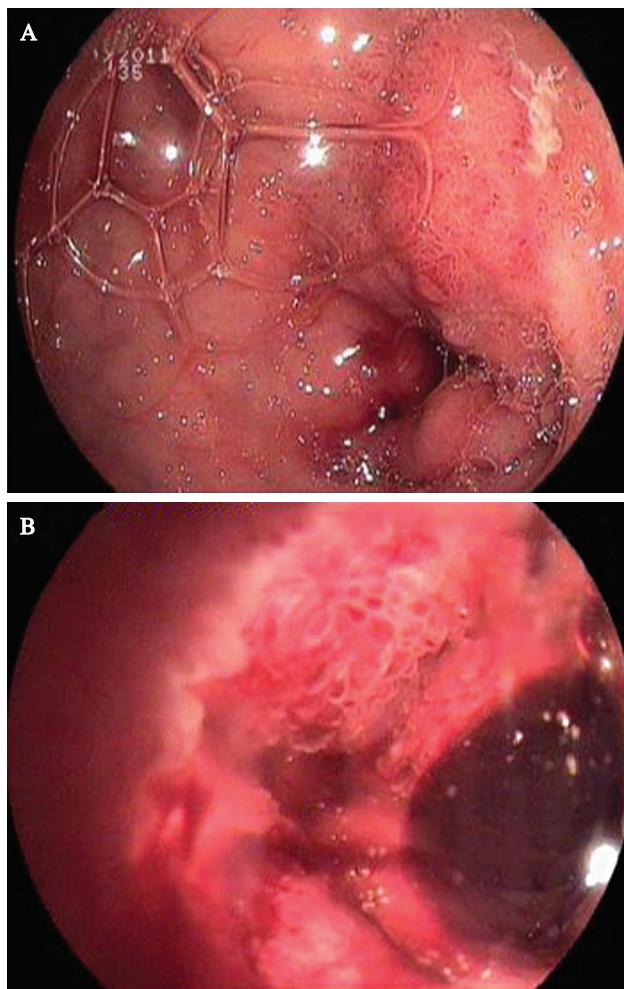


Figure 1 A, B. Endoscopic appearances of the lesion in duodenum

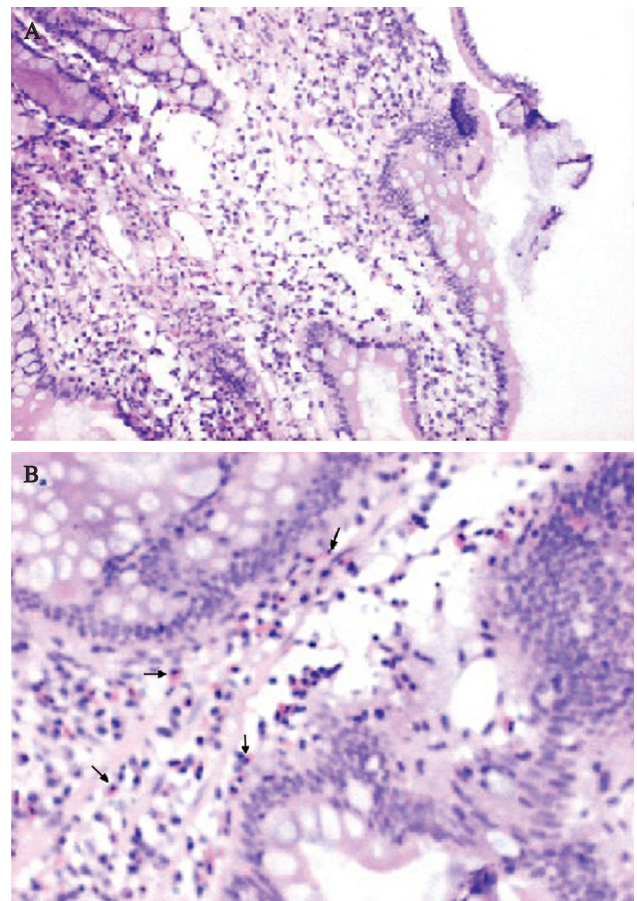


Figure 2. (A) Microscopic appearance of eosinophil infiltration in lamina propria and muscularis mucosa (Hematoxylin eosin, x40) **(B)** arrows, eosinophils (Hematoxylin eosin, x100)

malignancy, Crohn's disease, and non-tropical sprue. Another important differential diagnosis is the hypereosinophilic syndrome. The syndrome presents with longer than 6 months of persistent eosinophilia and may also be present in extraintestinal organs (skin, lymph nodes, heart, lungs, liver, spleen, central nervous system, etc..) (4,5).

We underline the importance of recognising EGE, since proper treatment can prevent further muco-

sal damage and progression to severe malabsorption and malnutrition.

In our case, eosinophilic infiltration in the duodenum, resulting in luminal obstruction of the second part of duodenum, was encountered as a complication of acute pancreatitis. This is a rare condition. In conclusion, the diagnosis of eosinophilic gastroenteritis should be considered in the patients with a duodenal mass.

REFERENCES

1. Kaijser R. Zur Kenntnis der allergischen affektionen des verdauungskanal vom standpunkt des chirurgen aus. Arch Klin Chir 1937; 188:36-64.
2. Talley NJ, Shorter RG, Phillips SF, Zinsmeister AR. Eosinophilic gastroenteritis: a clinicopathological study of patients with disease of the mucosa, muscle layer, and subserosal tissues. Gut 1990;31:54-8.
3. Talley NJ. Eosinophilic gastroenteritis. In: Feldman M, Friedman LS, Sleisenger MH, eds. Gastrointestinal and Liver Disease: Pathophysiology/Diagnosis/Management. Philadelphia, PA, USA: Saunders, 2002:1972-82.
4. Daneshjoo R, J Talley N. Eosinophilic gastroenteritis. Curr Gastroenterol Rep 2002;4:366-72.
5. Klein NC, Hargrove RL, Sleisenger MH, Jeffries GH. Eosinophilic gastroenteritis. Medicine (Baltimore) 1970;49:299.

Özlem ÖZER ÇAKIR¹, Murat BIYIK¹,
Gökhan GÜNGÖR¹, Hüseyin ATASEVEN¹,
Ali DEMİR¹, Lema TAVLI²

Departments of ¹Gastroenterology and Hepatology and
²Pathology, Selcuk University, Meram School of Medicine,
Konya