found on the mesenteric border of the small intestine, with its head and half of the body buried into the mesenteric fat. The buried part of the diverticular lesion was freed from the mesentery after a careful dissection. The diverticular lesion had a length of 9 cm and a diameter of 1 cm at the base, with a narrowed neck and an inflamed bun-shaped head (Figure 1A, 1B). A MD was initially suspected; however, a carcinoid tumor or small bowel duplication could not be ruled out in the differential diagnosis. The lesion was resected after appendectomy was completed. Histopathological examination of the specimens determined acute appendicitis and MD with a thin muscular layer (Figure 1C, 1D).

Traditionally, MD is known as typically located on the antimesenteric border of the small intestine. However, there are a few reports showing mesenteric location of MD, as in our case (2,3).

In conclusion, we highlight herein that this atypical localization may lead to confusion during surgery in the differential diagnosis of other lesions such as carcinoid tumors, small bowel duplications or acquired jejunoileal diverticulosis, etc. (4,5). Although rare, an atypical mesenteric location of MD should be kept in mind.

REFERENCES

1. Sagar J, Kumar V, Shah DK. Meckel's diverticulum: a systematic review. J R Soc Med 2006; 99: 501-5.
2. Hollinshead WH. The jejunum, ileum, and colon. In: Hollinshead WH, ed. Anatomy for surgeons: volume 2. New York: Harper and Row, 1971.
3. Segal SD, Albrecht DS, Belland KM, Elster EA. Rare mesenteric location of Meckel's diverticulum, a forgotten entity: a case study aboard USS Kitty Hawk. Am Surg 2004; 70: 985-8.
4. Vaos G, Misiakos EP. Congenital anomalies of the gastrointestinal tract diagnosed in adulthood-diagnosis and management. J Gastrointest Surg 2010; 14: 916-25.
5. Woods K, Williams E, Melvin W, Sharp K. Acquired jejunoileal diverticulosis and its complications: a review of the literature. Am Surg 2008; 74: 849-54.

Kerem KARAMAN[1], Cem TUĞMEN[1], Adnan TAŞ[2], Yavuz BEYAZIT[3], Eyüp KEBABÇI[1], Kamil PEHLİVANOĞLU[1], Ümit BAYOL[4]

Department of [1]General Surgery and [4]Pathology, Tepecik Education and Research Hospital, İzmir

Department of [2]Gastroenterology, Osmaniye Public Hospital, Osmaniye

Department of [3]Gastroenterology, Türkiye Yüksek İhtisas Education and Research Hospital, Ankara

A case of intestinal obstruction due to ileocecal tuberculosis

İleoçekal tüberküloza bağlı barsak tıkanıklığı olgusu

To the Editor,

Intestinal tuberculosis (ITB) is an extrapulmonary form of TB. Early correct diagnosis is important to prevent undue morbidity and mortality, but it can be quite difficult since ITB has no specific symptoms and mimics other disorders such as inflammatory bowel diseases and cancer. In this report, we present a case of intestinal obstruction due to ileocecal TB. The initial diagnosis suggested in our case was cancer of the cecum.

A 38-year-old male patient applied to our emergency department with complaints of abdominal pain, nausea, and vomiting for two days and a his-

Address for correspondence: Ömer Faruk ÖZKAN
Maras Cad. Trabzon Numune Training and Research Hospital, Department of General Surgery, 61040 Trabzon, Turkey
Fax: +90 462 230 23 07
E-mail: ozkanfomer@gmail.com

Manuscript received: 08.11.2011 **Accepted:** 08.12.2011

doi: 10.4318/tjg.2013.0459

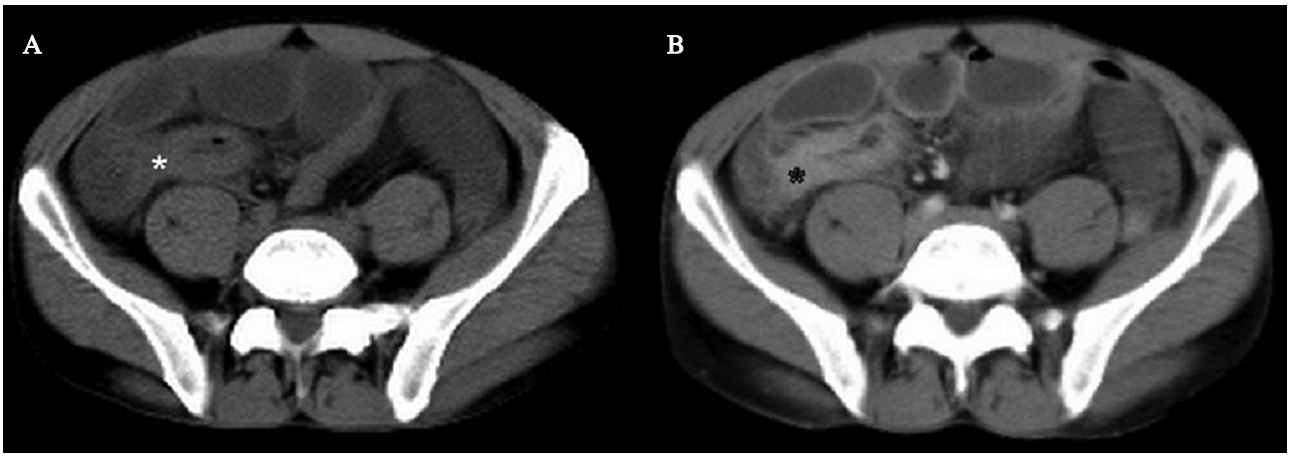

Figure 1. (A, B). Contrast-enhanced abdominal tomography demonstrating ileocecal region mass and dilated bowels.

tory of similar episodes for the preceding two months. He had abdominal distention and tenderness. An upright abdominal radiograph demonstrated multiple air-fluid levels in the small bowel. Contrast-enhanced computed tomography demonstrated dilated small bowel loop and a mass located at the ileocecal valve (Figure 1A,B). During the laparotomy, dilated small bowel loops and fibrotic adhesions were seen between the peritoneum and colon. An obstructive mass was observed in the ileocecal area with multiple mesenteric lymphadenopathies. Bridectomy and right hemicolectomy were performed. Histopathological examination revealed an ulcerative form of TB with caseating granulomas and Langhans-type giant cells (Figure 2).

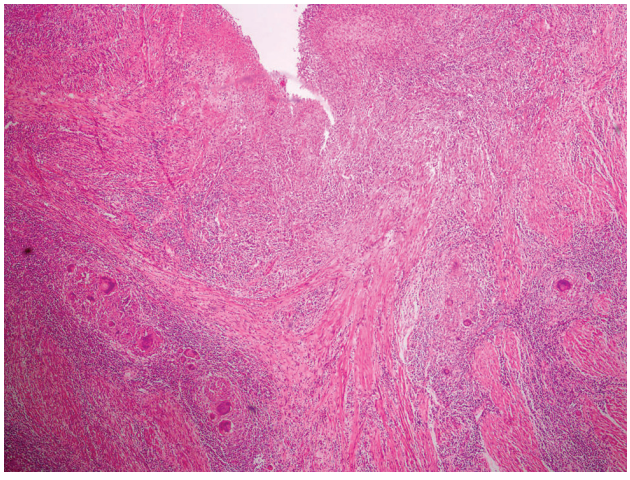

Figure 2. Caseating granulomas and Langhans-type giant cells in the colonic mucosa.

Tuberculosis (TB) is a major public health problem that remains a leading cause of mortality in undeveloped countries. The incidence in developed nations is rising due to immigration and increasing prevalence of patients with human immunodeficiency virus (HIV) infection and immunosuppressive treatment (1). ITB has been classified as primary or secondary infection based on its association or not with pulmonary TB, and it is seen most commonly among young adults in their second and fourth decades of life. The incidence rate between genders is similar (2,3).

Gastrointestinal TB is the sixth most common site to be affected. The ileocecal region is reported to be the area most commonly involved in ITB (3). The prolonged contact between the bacilli and mucosa may be the reason for the ileum and cecum being the most common sites of disease (2).

Intestinal tuberculosis can have acute, chronic or acute on chronic presentation in the form of intestinal obstruction. Symptoms are non-specific and vary depending on the localization and presentation of the disease, and include abdominal pain, distention, vomiting, night sweats, weight loss, and diarrhea (3-5). The diagnosis is quite difficult since ITB closely mimics other disorders including Crohn's disease, amebiasis, carcinoma of the colon, and histoplasmosis (4,5).

The first choice for diagnosis is colonoscopy and biopsy. The colonoscopic appearances in colonic TB are linear ulcers, nodules, pseudopolyps, and deformed cecum (6). Histopathologically, three types are described: ulcerative form (60%), hypertrophic form (10%) and ulcerohypertrophic form (30%). The ulcerohypertrophic form mostly mimics malignancies (7).

In conclusion, ITB should be considered in the differential diagnosis of intestinal obstruction and can mimic other pathologies such as malignancies and inflammatory bowel disease.

REFERENCES

1. Akbar M, Islam F, Haider IZ, et al. Surgical management of tuberculous small bowel obstruction. J Ayub Med Coll Abbottabad 2010; 22: 171-5.
2. Coccololini F, Ansaloni L, Catena F, et al. Tubercular bowel perforation: what to do? Ulus Travma Acil Cerrahi Derg 2011; 17: 66-74.
3. Michalopoulos A, Papadopoulos VN, Panidis S, et al. Cecal obstruction due to primary intestinal tuberculosis: a case series. J Med Case Rep 2011; 5: 128.
4. Sanai FM, Bzeizi KI. Systematic review: tuberculous peritonitis- presenting features, diagnostic strategies and treatment. Aliment Pharmacol Ther 2005; 22: 685-700.
5. Niaz K, Shraf M. Intestinal tuberculosis: diagnostic dilemma. Professional Med J 2010; 17: 532-7.
6. Singh V, Kumar P, Kamal J, et al. Clinicocolonoscopic profile of colonic tuberculosis. Am J Gastroenterol 1996; 91: 565-8.
7. Chong VH, Lim KS. Gastrointestinal tuberculosis. Singapore Med J 2009; 50(6): 638-45.

Ömer Faruk ÖZKAN[1], Faruk ÖZKUL[1], İsmail CAYMAZ[2], Ali GÜNER[1], Aydın KANT[3], Erhan REİS[1]

Department of [1]General Surgery, [2]Radiology and [3]Chest Medicine, Trabzon Numune Training and Research Hospital, Trabzon

Cirrhosis and intestinal B-cell lymphoma: two entities that are rarely associated with celiac disease

Siroz ve intestinal lenfoma; çölyak hastalığı ile ilişkili iki nadir durum

To the Editor,

Celiac disease (CD) is an immune-mediated permanent small bowel disorder triggered by the ingestion of gluten-containing food. Although this disease primarily affects the gut, many other tissues and organs may be affected in at least 20-30% of patients, as shown in recent studies on the association of CD and cryptogenic cirrhosis (1,2). Malignant intestinal lymphomas are mainly enteropathy-type T-cell lymphomas (ETCLs), defined as an independent category in the World Health Organization's classification, which may complicate CD in patients, whereas intestinal B-cell lymphomas associated with CD are seen less commonly (3,4).

A 62-year-old female was admitted to our hospital with malaise. Ten months before, she was diagno-

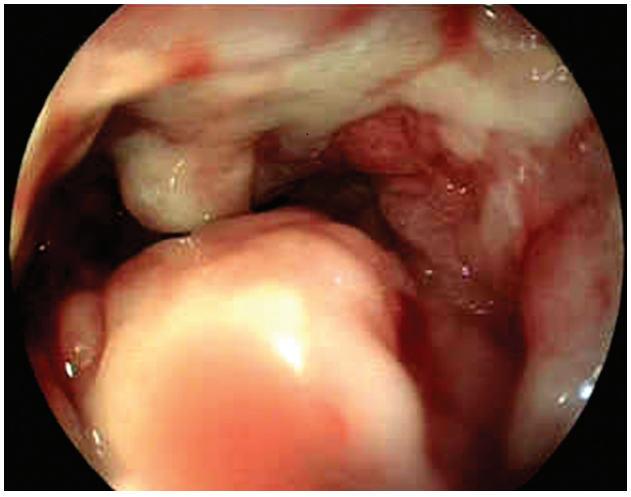

Figure 1. Endoscopic view of postbulbar area showing ulcerations.

Address for correspondence: Ali Erkan DUMAN
Kocaeli University Faculty of Medicine,
Department of Gastroenterology, İzmit, Turkey
Phone: + 90 262 303 73 83
E-mail: dralierkanduman@hotmail.com

Manuscript received: 06.11.2011 **Accepted:** 23.12.2011

doi: 10.4318/tjg.2013.0478