

## REFERENCES

1. Rothenberg ME, Mishra A, Brandt EB, Hogan SP. Gastrointestinal eosinophils. *Immunol Rev* 2001; 179: 139-55.
2. Moawad FJ, Veerappan GR, Lake JM, et al. Correlation between eosinophilic oesophagitis and aeroallergens. *Aliment Pharmacol Ther* 2010; 31: 509-15.
3. Kelly KJ, Lazenby AJ, Rowe PC, et al. Eosinophilic esophagitis attributed to gastroesophageal reflux: improvement with an amino acid-based formula. *Gastroenterology* 1995; 109: 1503-12.
4. Mishra A, Hogan SP, Brandt EB, Rothenberg ME. An etiologic role for aeroallergens and eosinophils in experimental esophagitis. *J Clin Invest* 2001; 107: 83-90.
5. Fogg IM, Ruchelli E, Spergel JM. Pollen and eosinophilic esophagitis. *J Allergy Clin Immunol* 2003; 112: 796-7.

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## A case of primary gastric Burkitt-like lymphoma with chemotherapy-induced perforation

*Kemoterapi ile perforasyon gelişen gastrik Burkitt benzeri lenfoma: Olgu sunumu*

To the Editor,

Gastric Burkitt-like lymphoma (BLL) is a rare and very aggressive type of non-Hodgkin's lymphoma (1). According to the lymphoma classification, BLLs are considered to be borderline between classic Burkitt lymphoma (BL) and diffuse large B-cell lymphoma (2). During the course of gastrointestinal lymphomas, perforation may occur spontaneously or as a complication of treatment (3).

A 42-year-old female presented with epigastric pain and weight loss for two months. Clinical examination was unremarkable, and upper endoscopic evaluation revealed a large ulcer in the mid portion of the anterior wall of the stomach (Figure 1). Histopathologic examinations of gastric biopsy specimens showed a dense infiltrate of atypical lymphoid cells with starry sky appearance. Immunohistochemical stains were positive for CD 20 (indicating B-cell lineage), and 90% of cells were positive for Ki 67 (indicating very high proliferation rate). The diagnosis was BLL. There were no *Helicobacter pylori* organisms. Endosonographic evaluation revealed hemicircumferential thick-

ness of the gastric wall, which was infiltrated through the serosa, but no lymph node metastasis (Figure 2). There was no other involvement found in PET CT and bone marrow biopsies.

The patient underwent two courses of chemotherapy (cyclophosphamide, adriamycin, vincristine, rituximab). After the second course of therapy, she presented with acute abdominal pain and abdominal distention. Laparotomy revealed perforation of the gastric corpus, which was repaired with primary closure. Endoscopy revealed a clear improvement, and biopsies showed a complete disappearance of the lymphoma two weeks after laparotomy. The patient received four cycles of chemotherapy afterwards. She remains in excellent condition three years later with no signs of recurrence.

To the best of our knowledge, this is the first case report of gastric BLL with perforation in an adult. Gastrointestinal perforations occur rarely in association with gastric lymphomas (3). BL is known for its rapid doubling time, transmural involve-

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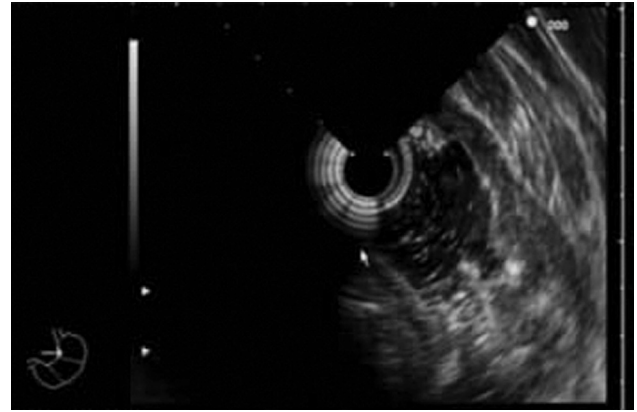
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Manuscript received: 02.03.2011 Accepted: 15.08.2011

doi: 10.4318/tjg.2012.0373



**Figure 1.** A large gastric ulcer located in the mid portion of the anterior wall of the stomach.



**Figure 2.** Endoscopic ultrasound showed hemircumferential thickness of gastric wall.

ment and sensitivity to chemotherapeutics; therefore, complications can be seen throughout the course of the disease (4). Perforation can occur spontaneously or during the chemotherapy cycles (5). Although perforations were described in BL, there is no report of BLL with perforation. Our case presented with large gastric ulcer and chemotherapy-

induced perforation developed. The perforation was thought to have occurred due to tumor cell necrosis in the anterior wall of the stomach after the second dose of chemotherapy. The favorable outcome in this patient is attributed to careful follow-up, early diagnosis and management of the perforation, and adequate chemotherapy.

## REFERENCES

1. Brazier RM, Arber DA, Slovak ML, et al. The Burkitt-like lymphomas: a Southwest Oncology Group study delineating phenotypic, genotypic, and clinical features. *Blood* 2001; 97: 3713-20.
2. Harris NL, Jaffe ES, Stein H, et al. A revised European-American classification of lymphoid neoplasms: a proposal from the International Lymphoma Study Group. *Blood* 1994; 84: 1361-92.
3. Guven A, Demirbag S, Atabek C, Ozturk H. Spontaneous gastric perforation in a child with Burkitt lymphoma. *J Pediatr Hematol Oncol* 2007; 29: 862-4.
4. Yabuki K, Tamasaki Y, Satoh K, et al. Primary gastric lymphoma with spontaneous perforation: report of a case. *Surg Today* 2000; 30: 1030-3.
5. Ara C, Coban S, Kayaalp C, et al. Spontaneous intestinal perforation due to non-Hodgkin's lymphoma: evaluation of eight cases. *Dig Dis Sci* 2007; 52: 1752-6.

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