

A Rare Etiology of Acute Abdomen Syndrome: Perforation of The Small Intestinal Lymphoma

Akut Batın Sendromunun Nadir Bir Etiyolojisi: İnce Barsak Lenfoma Perforasyonu

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ABSTRACT

Primary intestinal lymphomas (IL) are rare clinical entities despite the gastrointestinal tract is the most common localization for primary extra nodal lymphomas. Generally IL presents with non-specific and chronic gastrointestinal symptoms. We aimed to present a perforated small intestinal lymphoma case who admitted emergency service with the complaint of sudden onset abdominal pain.

Keywords: Lymphoma, Non-Hodgkin's lymphoma, B cell lymphoma

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ÖZET

Gastrointestinal sistem primer ektranodal lenfomaların en sık görüldüğü yer olmasına rağmen primer intestinal lenfomalar nadir karşılaşılan klinik durumlardır. İntestinal lenfomalar genellikle non-spesifik ve kronik abdominal şikayetlerle ortaya çıkarlar. Bu yazıda acil servise ani başlayan şiddetli karın ağrısı şikâyeti ile başvuran perfore olmuş ince barsak lenfoma olgusunu sunmayı amaçladık.

Anahtar Kelimeler: Lenfoma, Non-Hodgkin lenfoma, B hücreli lenfoma

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Introduction

The gastrointestinal tract (GIT) is the most common localization of primary extranodal non-Hodgkin's lymphomas (NHL). Primary intestinal NHL is the third most common small intestinal neoplasm after adenocarcinoma and carcinoid tumors.¹ The term of 'primary intestinal lymphoma' includes some particular subgroups: immunoproliferative small intestinal disease (Mediterranean lymphoma), the western type lymphoma, the enteropathy-associated T-cell lymphoma and the childhood type lymphoma. ² Due to the fact that clinical and imaging findings are silent, the diagnosis of intestinal lymphoma are difficult and generally detected via laparotomy. In this paper, present a perforated small intestine lymphoma case because of its rare incidence.

Case Report

A 65-year-old man attended to emergency service with the complaint of a sudden onset severe abdominal pain. In physical examination, revealed abdominal tenderness and diffuse muscular defense. Blood counts were normal. Free air imaging at below right diaphragmatic area was detected in conventional abdominal graphy (*Figure 1*). Initially, peptic ulcer perforation was suspected due to clinical complaints started only 2 hours before and muscular defense accompany of intraabdominal free air was present in physical and radiological examination. In the operation; exploration of the gastric antrum, 1st and 2nd part of the duodenum were normal. In the further examination, a mass that 5 cm in diameter, lobulated contour and perfo

Figure 1: Conventional abdominal graphy; free air view at right subdiaphragmatic area



rated was determined in antimesenteric location in jejunal segment of 120 cm away from teritz ligament (*Figure 2 and 3*). There weren't detected lymphadenopathy in the mesenteric or paraaortic area, liver and spleen were normal as macroscopically. Partial jejunal resection and end-wise anastomosis were performed. The patient was discharged as uneventful on postoperative fifth days. In the pathologic examination, malignant cells that containing of hyperchromatic nucleus, narrow cytoplasm, small nucleolus and infiltrated to serosa were detected and malignant lymphoma or poorly differentiated carcinoma was thought. Immunohistochemical staining was diffuse positive for CD20 and negative for CD5, CD10 and Epstein-Barr virus. Thus, we made a diagnosis of malignant lymphoma (diffuse large B cell lymphoma). The patient who adjuvant chemotherapy planned died after 6 months on account of systemic complications.

Discussion

The incidence and localization of primary gastrointestinal lymphomas vary in different geographical regions around the world. The stomach is the most common site of primary gastrointestinal lymphomas in western country, but the small intestine is the most common localization for intestinal lymphomas in the Middle East. In

addition, intestinal lymphomas may arise in the colon and rectum.³ Moreover clinical features and prognosis are different from each other.

Figure 2 and 3: Operation findings; a mass that 5 cm in diameter and perforated from antimesenteric part in the jejunum



Intestinal lymphomas generally presents with non-specific abdominal complaints such as abdominal pain, nausea, vomiting, constipation or diarrhea.² These complaints are the most often encountered abdominal complaints in the emergency services. Therefore, these complaints are not pathognomonic signs for any disease such as intestinal lymphomas and diagnosis of intestinal lymphoma is not a frequent diagnosis in emergency services. Whereas, peptic ulcer perforation is a more commonly encountered clinical entity in emergency services around the world. Initially, was thought of peptic ulcer perforation as first diagnosis because of patient's history, physical examination findings and radiologic imaging of subdiaphragmatic free

air imaging at admission. Because combination of clinical and radiologic findings which sudden onset of severe abdominal pain, diffuse abdominal tenderness and subdiaphragmatic free air view in the abdominal graphy are generally suggest this disease.

Different radiologic views can be detected in the barium studies because of varied macroscopic structures such as infiltrating, polypoid, nodular or ulcerative form.⁴ Non-Hodgin's lymphoma of the small bowel doesn't cause a desmoplastic reaction so that intestinal obstruction is rare, but the large and solitary polypoid mass may cause an intussusception. On computed tomography (CT), typically presents as a homogenous density mass causing mural thickening and separation of adjacent small bowel loops.⁵

The treatment protocols are unclear. Surgical resection should be applied for localized disease. Patients prognosis who has early stage disease and underwent surgical resection is better than others who has extensive disease.⁶ The management of extensive disease remains controversial. Conservative resection consists of limited resection of obstructed or perforated segments followed by abdominal radiation. However, some authors argued for aggressive surgical debulking of all intestinal lymphomas. In fact, aggressive surgery may be benefit, because this procedure may improve local control and eliminate early mortality from visceral perforation or hemorrhage in advanced disease during adjuvant therapy.² Adding chemotherapy

to treatment protocol positively effects of survival.

In conclusion, the gastrointestinal lymphomas are rare diseases and might be presented with unexpected clinical entities such as perforation.

References

1. Ibrahim EM, Ezzat AA, El-Weshi AN, Martin JM, Khafaga YM, Al Rabih W, et al. Primary intestinal diffuse large B-cell non-Hodgin's lymphoma: Clinical features, management and prognosis. *Annals of Oncology* 2001;12:53-8.
2. Zinzani PL, Magagnoli M, Pagliani G, Bendandi M, Gherlinzoni F, Merla E, et al. Primary intestinal lymphoma: clinical and therapeutic features of 32 patients. *Haematologica* 1997; 82:305-308.
3. Sheperd NA, Hall PA, Coates PJ, Levison DA. Primary malignant lymphoma of the colon and rectum. A histopathological and immunohistochemical analysis of 45 cases with clinicopathological correlations. *Histopathology* 1988;12:235-52.
4. Verma D, Stroehlein JR. Adenocarcinoma of the small bowel: a 60-yr perspective derived from M.D.Anderson Cancer Center tumor registry. *Am J Gastroenterol* 2006;101:1647-54.
5. Gore RM, Mehta UK, Berlin JW, Roa V, Newmark GM. Diagnosis and staging of small bowel tumours. *Cancer Imaging* 2006;6:209-12.
6. Albayrak D, İbis AC, Hatipoglu AR, Polat N, Hoscokun Z. Perfore primer ince barsak lenfomasi: Olgu sunumu. *Trakya Univ Tıp Fak Derg* 2008;25:60-4.