

Endosonography and elastography in the diagnosis of esophageal tuberculosis

Özofagus tüberkülozu tanısında endosonografi ve elastografinin yeri

To the Editor,

Tuberculosis (TB) is an infectious disease caused by the bacillus Mycobacterium tuberculosis. It typically affects the lungs but can affect other sites as well. Turkey has an estimated prevalence of 25-49 tuberculosis cases per 100.000 population in 2011 according to WHO estimates (1). Tuberculosis is a rare cause of dysphagia when it affects the esophagus (ETB). The rarity of the disease makes it difficult to diagnose on the basis of clinical, radiological and endoscopic findings. Additional features of ETB include the difficulties of isolating tuberculi bacilli and the presence of caseous necrosis (2). As delay in diagnosis and treatment increases the severity of disease at the time of diagnosis as well as the risk of death (3), new innovative diagnostic tools may confer benefits for the management of ETB.

A twenty-five year-old female patient with dysphagia was admitted to our gastroenterology clinic. Upper gastrointestinal endoscopy revealed an exophytic ulcer in the middle segment of esophagus (Figure 1). Biopsy was inconclusive, with the findings of chronic inflammation and no evidence of malignancy. No acid-fast bacilli or caseous necrosis were found in histologic examination of biopsy specimens. A second biopsy of the ulcer had the same findings as the first. Linear echoendoscopy with elastography was performed and a pathologic, subcarinal lymph node measured 12 mm was found, with a homogenous area of intermediate hardness (green) consistent with an inflammatory, reactive lymph node (Figure 2). Fine needle aspiration biopsy of the lymph node gave the findings of caseous necrosis with positive acid



Figure 1. Upper gastrointestinal endoscopy showing ulcer in the esophagus

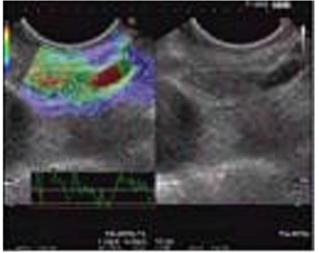


Figure 2. Endosonography showing lymph node in the right half of the figure and elastography showing benign nature of lymph node in the left half of the figure.

E-mail: drokocaman@hotmail.com

fast bacilli. Antituberculous treatment with rifampicin, isonizaid, ethambutol, and pyrazinamide was started, and the patient was instructed to follow up with the gastroenterology outpatient clinic. Three months after the start of treatment, the patient was free of dysphagia and a decrease in the size of the ulcer was observed on endoscopy.

Endosonography (EUS) is a diagnostic and therapeutic tool evolving into a technology with major clinical impact on gastroenterology in recent years. EUS elastography is an imaging procedure used for the visualization of tissue elasticity during

EUS examinations (4). EUS is useful in evaluating the depth of ulcers and findings of malignancy in the esophagus. Lymphadenopathy associated with ulcers can also be examined and biopsied at the same time. Elastography is useful for the differentiation of malignant and benign lymph nodes.

EUS with elastography may clarify ambiguity in the diagnosis of an esophageal ulcer and add valuable clues for the diagnosis of esophageal tuberculosis in patients having conventional diagnostic methods for suspected esophageal tuberculosis.

REFERENCES:

- World Health Organization. Global tuberculosis control. Introduction. Geneva: World Health Organization: 2011; 3-7.
- 2. Savage PE, Grundy A. Esophageal tuberculosis: an unusual cause of dysphagia. Br J Radiol 1984; 57: 1153-5.
- Luelmo F. Why does treatment fail and what can be done to avoid poor treatment outcome? In: Geneva FT, ed. Toman's Tuberculosis Case detection, treatment, and monitoring-questions and answers. 2nd ed. World Health Organization: 2004; 207-8.
- Saftoiu A, Vilman P. Endoscopic ultrasound elastography a new imaging technique for the visualization of tissue elasticity distribution. J Gastrointestin Liver Dis 2006; 15: 161-5.

Orhan KOCAMAN, Hakan ŞENTÜRK, Ahmet DANALIOĞLU, Kürşat TÜRKDOĞAN, Elif ARABACI, Kemal YILDIZ, Ali Tüzün İNCE

 $\label{lem:prop:prop:prop:prop:standard} Department of Gastroenterology, Bezmialem \ University, School of Medicine, İstanbul$

An unusual simultaneous occurence of gastric adenocarcinoma, leiomyoma and B-cell small lymphocytic lymphoma involving the perigastric lymph nodes and spleen

Aynı anda perigastrik lenf nodları ve dalakta KLL/SLL infiltrasyonu bulunduran gastrik adenokarsinomalı nadir bir olgu

INTRODUCTION

Chronic lymphocytic leukemia/small lymphocytic lymphoma (CLL/SLL) is a low-grade, indolent, systemic neoplasm of monomorphic small, round, B-lymphocytes in the peripheral blood, bone narrow and lymph nodes (1). This disease exhibits a

variety of immunologic impairments that might increase the risk of second malignancy (1, 2). In fact, there is evidence that the risk of development of non-hematologic malignancies is increased in patients with CLL/SLL, compared with that of the

Address for correspondence: Hatice ÜNVERDİ Etlik İhtisas Education and Research Hospital, Department of Pathology, Ankara, Turkey

E-mail: drgermen@yahoo.com

Manuscript received: 19.12.2011 Accepted: 22.06.2012

doi: 10.4318/tjg.2013.0566