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Case Report

Gastric MALT Lymphoma Presenting as a Large Solitary Submucosal Mass

M.R. Fattahi

Abstract
Herein, we report on a 24-year-old woman with a large well-marginated gastric mucosa-associated lymphoid tissue (MALT) lymphoma. She presented with dysphagia and epigastric pain. In esophagogastroduodenoscopy there was a huge bulging submucosal mass with normal appearing mucosa in the cardia in addition to a grade B gastro-esophageal reflux disease. She was treated with a proton pump inhibitor and an intramural gastric mass was confirmed by a computed tomography scan. She underwent surgical operation and was well in her last follow-up visit after 16 months.
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Keywords · MALToma • Stomach • *H. pylori*

Introduction

The normal human stomach lacks organized lymphoid tissue. Acquisition of mucosa-associated lymphoid tissue (MALT) in the stomach is considered to be a direct consequence of chronic infection with *H. pylori*.[1] Moreover, primary low-grade B-cell MALT lymphoma is a consequence of chronic *H. pylori* infection and an uncommon malignancy with a prolonged period of localized disease. It can possibly transform to high-grade MALT lymphoma (MALToma),[2] and still is the most common type of primary gastric lymphoma.[3] Because of the various macroscopic patterns, the endoscopic diagnosis of MALToma is often difficult.[2]

Case Presentation

A 24-year-old woman referred to the Outpatient Department of Shiraz University of Medical Sciences with chief complaint of dysphagia, epigastric pain and pyrosis for a duration of nine months. She had no weight loss and her endoscopic evaluation showed a grade B gastroesophageal reflux disease and an intraluminal bulging mass measuring about 8×8 cm in cardia, adjacent to the esophageal hiatus with a normal appearing mucosa. Forceps biopsy performed in two consecutive sessions revealed *H. pylori* and positive gastritis (Fig. 1)

Omeprazole was prescribed and an abdominal computed tomography (CT) scan revealed an intramural mass in gastric cardia (Fig. 2). The patient underwent an explorative laparotomy and a well-demarcated mass measuring 7×7 cm was detected in the wall of gastric cardia. It was resected and a proximal gastrectomy plus splenectomy was performed. Histopathologic study of the resected tissue revealed a low-grade gastric MALT lymphoma, in addition to *H. pylori* positive gastritis. The spleen was normal and no lymph node was involved

Department of Internal Medicine
Nemazee Hospital
Shiraz University of Medical Sciences
Shiraz Iran

Correspondence: Mohammad Reza Fattahi ,MD,
Department of Internal Medicine,
Nemazee Hospital,
Shiraz University of Medical Sciences,
Shiraz, Iran.
Tel/Fax: + 98 711 6261089
E-mail: fattahim@sums.ac.ir

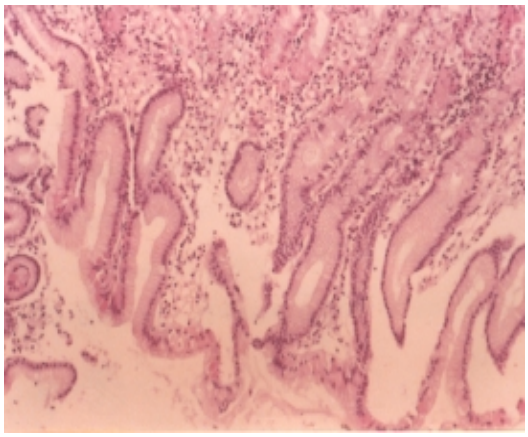

Fig 1: Section from biopsy showing minimal infiltration of mature lyphocytes and a few plasma cells between the glands. Glandular architectures are normal. H&E: x 250

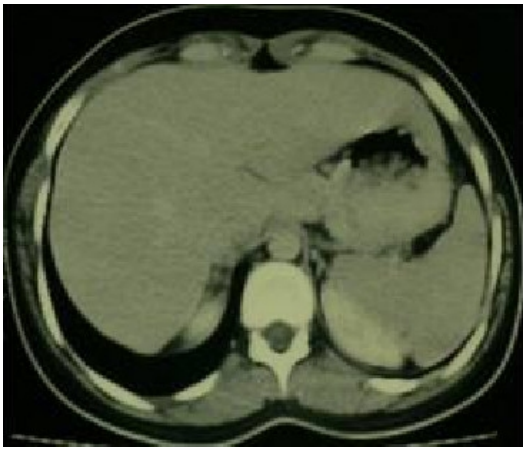

Fig 2: Axial contrast enhanced CT scan image of the upper abdomen showing thickening of the wall of gastric cardia with large fungating mass protruded into the lumen of the stomach.

Anti-*H. pylori* medications prescribed for the patient and in the 16 months follow-up, the patient was asymptomatic and no tumor recurrence was detected in upper GI endoscopic evaluation.

Discussion

Based on epidemiological, histological, experimental and therapeutic studies, it was shown that MALToma is an *H. Pylori*-related tumor of B-cell origin.[4] Eradication of *H. pylori* lead to histological regression of the tumor in about 70% of patients in early stage low-grade MALToma.[4] Since the first description of MALToma in 1980, rapid advances have been made in understanding the pathogenesis and underlying molecular events associated with the development of the tumor.[5] The unique pathological and clinical properties of the tumor has become a focus of interest in recent years.

Gastroscopy of patients with MALToma has revealed superficial lesions in 56%, ulcerofungating lesions in 19%, and ulceroinfiltrative in 25% of patients.[6] Invasion of muscularis propria or deeper layers was seen in 28% of patients.[6] Lymph node involvement was seen in 40% of patients even in low-grade disease confined to mucosa and submucosa.[6]

Two unusual presentations were observed in this patient. First, the macroscopic appearances of the tumor presented as a localized large size submucosal gastric mass without mucosal involvement. This is in contrast to the usual presentation of MALToma which mostly affects mucosa and often is diagnosed by endoscopic biopsy, whereas in this patient the diagnosis was made by CT scan. The second was the absence of lymph node involvement despite the presence of a large intramural location of gastric MALToma, as opposed to the high incidence of lymph node involvement in MALToma, even in those confined to mucosal layer.

Examination by endoscopic ultrasonography has been shown to be the most reliable method of differentiating the layers of gastric wall and determining the infiltration depth of lymphomas.[7] Eradication of *H. pylori* has to be considered as a single first-line treatment with fewer side effects than radiation, surgery or chemotherapy and as a stomach–conserving therapy in patients with low-grade MALToma.[7]

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