Gastric Polypoid Lymphoma of Mucosa-Associated Lymphoid Tissue Type

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Abstract
A polypoid, or submucosal tumor-like, presentation of Mucosa-Associated Lymphoid Tissue (MALT) lymphoma is relatively rare, while correct clinical and histopathological diagnoses of such cases are important for patients in order to avoid unnecessary advanced surgical intervention. We reported an 88-year-old gentleman with a low-stage MALT lymphoma, presenting with a polypoid subepithelial tumor on endoscopy. The present case would bring attention to both clinicians and pathologists that gastric MALT lymphoma could present as a long-standing, polypoid subepithelial tumor, and the patient should be managed conservatively with medical treatment or localized radiotherapy.

Keywords: Stomach; Polypoid; MALT Lymphoma; Endoscopy

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Introduction

Helicobacter pylori is a well known microorganism to result in diseases from chronic active gastritis, ulcer to Mucosa-Associated Lymphoid Tissue (MALT) lymphoma [1]. The latter is a mature B-cell neoplasm and characterized by the presence of lymphoepithelial lesions [2]. Morphologically, there are heterogeneous B cells, including marginal zone cells, monocyteid cells, plasma cells, and scattered large cells resembling centroblasts or immunoblasts. MALT lymphoma usually affects adult patients in their fifth to sixth decades with a slight female predominance [1]. Although it is one of the most common lymphomas in the gastrointestinal tract (following diffuse large B-cell lymphoma), diagnosis in the early stage or unexpected cases is sometimes difficult because of its non-specific signs and symptoms. Therefore, both clinicians and pathologists should have a high index of suspicion to this lymphoma, and repeated biopsies at multiple regions may be necessary [3]. Additional immunohistochemical or molecular studies are useful for the difficult or equivocal cases [4]. Here, we report an MALT lymphoma with the unusual polypoid presentation on endoscopy.

Case Report

An 88-year-old man received esophagogastroduodenoscopy for the presentation of gastrointestinal bleeding for several days. In addition to one small hyper plastic polyp (upper in Figure 1a), there was another 2 cm tumor with normal overlying mucosa at the greater-curvature side of gastric corpus (center in Figure 1a). An endoscopic ultrasound revealed a hypoechoic, wide base tumor originating from the submucosa with muscularis propria involvement (Figure 1b). He received operation for the tumor excision. Pathology of the excised tumor showed a gastric Mucosa-Associated Lymphoid Tissue (MALT) lymphoma with lymphoepithelial lesions (Figure 1c), which was positive for Immunoglobulin Kappa (IGK) chain gene rearrangements (Figure 1d). Localized radiotherapy was administered, and the 3-year follow-up showed a disease-free status.
**Figure 1:** A polyoid gastric MALT lymphoma

(a) Endoscopic view of sub epithelial tumor. In addition to one small hyperplastic polyp (upper), there is another 2 cm tumor with normal overlying mucosa at the greater-curvature side of gastric corpus (center).

(b) Endoscopic ultrasonographic view of sub epithelial tumor. A homogenous hypo echoic tumor grows from sub mucosa with involvement of muscularis propria.

(c) (H&E, 100X) Pathology of the excised tumor shows that monocytoid tumor cells (right) surround a reactive follicle (left upper), which contains some tingible-body macrophages. Lymphoepithelial lesions are evident (inset, 400X).

(d) Molecular study identifies immunoglobulin kappa (IGK) chain gene rearrangements (left panel) in tubes A and B in duplicate.
Discussion

Nearly half of MALT lymphoma is located at the gastrointestinal tract and stomach is the most common site [5]. Gastric MALT lymphoma is occasionally discovered unexpectedly because the clinical symptoms are non-specific and similar to functional dyspepsia or peptic ulcer. Few organized reports do describe in detail the endoscopic findings of gastric MALT lymphoma. The endoscopic features are quite variable, with the common ones being multifocal erosions, ulceration, enlarged folds, and multifocal gastritis. In contrast, the presentation of a polypoid or mass-forming lesion is uncommon and, instead, indicative of a stromal tumor, epithelial tumor, or other more aggressive lymphomas [5, 6]. Polypoid MALT lymphoma, a rare presentation, accounts for only 8.3% of all gastric MALT lymphoma cases [5]. Medical treatment or localized radiotherapy is generally appropriate for disease control. Awareness of this unusual form of MALT lymphoma avoids misdiagnosis. This case reminds both clinicians and pathologists that gastric MALT lymphoma could present as a polypoid tumor.

References