# Colitis or Cancer? A Rare Case of Colonic MALT Lymphoma Revealed Through Biopsy

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## Abstract:

Colonic mucosa-associated lymphoid tissue (MALT) lymphoma is an uncommon subtype of extranodal marginal zone non-Hodgkin lymphoma that may clinically and endoscopically mimic inflammatory bowel disease (IBD), leading to significant diagnostic delays. Although gastric MALT lymphoma is well characterized, colonic involvement is rare and accounts for only a small proportion of cases worldwide. We present an expanded case of a 77-year-old male who presented with chronic diarrhea, profound weight loss, and colonic inflammation initially misinterpreted as ulcerative colitis. Histopathologic evaluation ultimately demonstrated a monoclonal lambda-restricted B-cell infiltrate consistent with low-grade MALT lymphoma. Staging with PET/CT revealed widespread low-grade lymphadenopathy consistent with Ann Arbor Stage III disease. This report underscores the importance of thorough diagnostic evaluation when endoscopic findings resemble IBD, particularly in older adults, and highlights current evidence-based approaches to diagnosis, staging, and management of colonic MALT lymphoma [1,4].

## Introduction:

Mucosa-associated lymphoid tissue (MALT) lymphoma is an indolent, extranodal B-cell lymphoma arising from the marginal zone of mucosal lymphoid tissue. It accounts for approximately 8% of all non-Hodgkin lymphomas, with the stomach representing the most common site due to chronic Helicobacter pylori–related antigenic stimulation [2]. Colonic MALT lymphoma, however, is exceedingly rare, comprising only 2–3% of all MALT lymphomas and less than 0.5% of all gastrointestinal lymphomas [3]. The pathogenesis often involves chronic antigenic stimulation, autoimmune conditions, or underlying inflammatory states, although many colonic cases remain idiopathic. Clinically, colonic MALT lymphoma may present with

nonspecific symptoms such as diarrhea, abdominal discomfort, hematochezia, or weight loss—features that often overlap with ulcerative colitis and Crohn's disease [5]. Endoscopic findings similarly lack specificity and may include mucosal ulcerations, nodularity, friability, or diffuse inflammation. As a result, misdiagnosis is common.

Accurate diagnosis requires a combination of histopathology, immunophenotyping, molecular studies, and cross-sectional imaging. The hallmark histologic finding is a dense infiltrate of small-to-medium B cells demonstrating light-chain restriction and positivity for markers such as CD20, CD79a, and BCL-2, with negative expression of CD5, CD10, and cyclin D1, distinguishing MALT lymphoma from mantle cell lymphoma, follicular lymphoma, and chronic lymphocytic leukemia [3,6]. Given its rarity and potential for delayed recognition, increased clinical awareness is essential.

## Case Presentation:

A 77-year-old man with a medical history significant for prostate cancer, type 2 diabetes mellitus, hyperlipidemia, Barrett's esophagus, and previously documented rectosigmoid MALT lymphoma presented with a several-month history of worsening fatigue, dehydration, confusion, and diarrhea occurring 4–5 times daily, including nocturnal episodes. He also reported a 40-pound unintentional weight loss. Laboratory evaluation revealed mild anemia, hypoalbuminemia, and elevated inflammatory markers. CT imaging of the abdomen demonstrated diffuse colonic wall thickening and mesenteric lymphadenopathy. Infectious workup, including Clostridioides difficile PCR, was negative.

Colonoscopy showed severe, continuous colonic inflammation characterized by ulcerations, friability, and erythema, initially suggesting ulcerative colitis. Empiric therapy with mesalamine and prednisone was initiated. However, biopsies obtained from multiple colonic segments demonstrated focal acute cryptitis with dense, atypical lymphoid infiltrates involving the lamina propria. Immunohistochemistry revealed B-cell markers CD20+, CD79a+, BCL-2+ with lambda light-chain restriction and absence of CD5, CD10, BCL-1 (cyclin D1), and BCL-6—findings consistent with low-grade MALT lymphoma [4]. The Ki-67 proliferation index was low (~10%), further supporting an indolent lymphoma.

Flow cytometry identified a monoclonal B-cell population consistent with marginal zone lymphoma. Additional testing for MYD88 L265P mutation was negative, making lymphoplasmacytic lymphoma less likely. PET/CT demonstrated mild-to-moderate hypermetabolic lymphadenopathy across mesenteric, retroperitoneal, and thoracic nodes, compatible with Ann Arbor Stage III disease. The patient was referred to hematology/oncology and initiated on rituximab-based therapy, with consideration for bendamustine depending on therapeutic response.

## Discussion:

Colonic MALT lymphoma represents a diagnostic challenge because clinical and endoscopic presentations often mimic more common inflammatory conditions such as ulcerative colitis. The patient's presentation—chronic diarrhea, nocturnal symptoms, significant weight loss, and diffuse colitis—strongly resembled IBD, leading to initial misclassification. Such overlap has been described in several case series and reviews, where MALT lymphoma presented as multifocal ulcerations or diffuse mucosal inflammation indistinguishable from IBD [5,7].

Histopathologic evaluation remains the cornerstone of diagnosis. The presence of small atypical B cells infiltrating the lamina propria, along with immunophenotypic findings (CD20+, CD79a+, CD5–, CD10–, cyclin D1–), helps distinguish MALT lymphoma from other B-cell neoplasms [3,6]. Light-chain restriction further confirms clonality. In some cases, molecular studies demonstrating rearrangement of the MALT1 gene or API2-MALT1 fusion may assist diagnosis, although such findings are less common in colonic cases [2].

Staging with PET/CT is essential because extranodal marginal zone lymphoma can involve multiple mucosal sites, the lymphatic system, and bone marrow. Disseminated disease, as in this patient, does not preclude favorable outcomes due to the generally indolent course of MALT lymphoma.

Management typically depends on disease localization and symptom severity. Localized gastric MALT lymphoma may respond to H. pylori eradication alone, but colonic lesions generally require systemic therapy. Rituximab monotherapy or rituximab combined with alkylating agents such as bendamustine demonstrates high response rates with acceptable toxicity profiles [8]. Radiotherapy may be considered for localized disease, though multifocal colonic involvement commonly necessitates systemic treatment. Prognosis is generally favorable, with 5-year survival rates exceeding 80% for most MALT lymphomas despite the potential for disseminated disease [2,8].

## Conclusion:

This case highlights the importance of considering lymphoid malignancy in older adults presenting with atypical or treatment-refractory colitis. Because colonic MALT lymphoma is rare and may mimic IBD, definitive diagnosis relies on histopathology, immunophenotyping, and comprehensive staging. Early recognition ensures timely oncologic therapy and prevents delays caused by inappropriate treatment for presumed inflammatory disease. Continued awareness and reporting of colonic MALT lymphoma are essential to improve diagnostic accuracy and optimize patient outcomes.

**References:**


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