Crohn's Disease Presenting as Diffuse Granulomatous Mesenteric Adenitis

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Introduction

Crohn's Disease (CD) is a chronic idiopathic inflammatory bowel disease with variable clinical and histologic manifestations. Microscopic findings include transmural inflammation and may show granuloma. The impact of extraintestinal granulomatous inflammation in CD is not well understood. We present an atypical initial presentation of CD in the form of diffuse granulomatous mesenteric adenitis.

Case Description

A 31-year-old woman with ampiginous choroiditis presented with a month of diffuse abdominal pain and fever. Computed tomography (CT) of the abdomen/pelvis from an outside institution showed diffuse mesenteric lymph node enlargement with normal appearing bowels.

Given her fevers, lymphadenopathy, mild leukocytosis, and elevation in inflammatory markers, thorough infectious and rheumatologic workups were pursued and unrevealing. Whole body positron emission tomography showed hypermetabolic mesenteric lymph nodes and terminal ileitis; subsequent colonoscopy noted inflamed, friable mucosa with biopsies showing active ileitis, ulceration, architectural distortion, and well-formed intramucosal granuloma consistent with Crohn's ileitis. CT-guided lymph node biopsy also showed granulomatous inflammation making sarcoidosis a differential diagnosis.

The patient was discharged in stable condition and followed up with the outpatient gastroenterology clinic. Given the uncertainty regarding her underlying diagnosis, she was trialed on 2 months of budesonide. Magnetic resonance enterography following treatment showed significantly improved inflammation of the terminal ileum with resolution of the mesenteric lymphadenopathy.

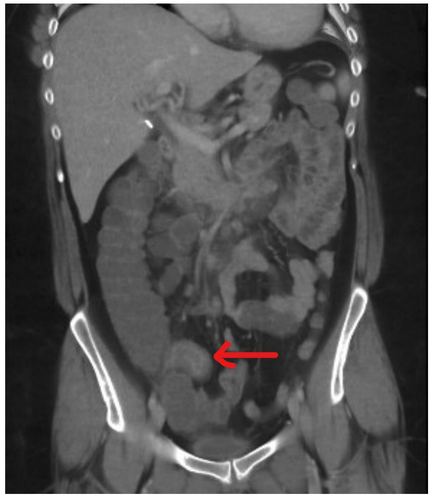

Image 1: Computed tomography showing mesenteric haziness and terminal ileitis (red arrow).

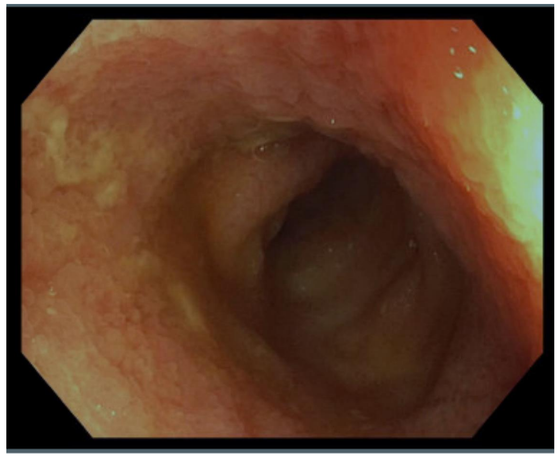

Image 2: Endoscopic findings of inflamed terminal ileum with congested, erythematous, and ulcerated mucosa.

Discussion

Mesenteric adenitis with terminal ileitis has been shown to occur in infectious ileitis, CD, and sarcoidosis. Rarely, CD can coexist with sarcoidosis.

Histologic features of CD include ulceration, granuloma formation, and transmural inflammation, in contrast to intestinal sarcoidosis which only involves the mucosa. Granulomas outside the gastrointestinal tract favor the diagnosis of sarcoidosis but can still occur with CD. In CD, the location of granulomatous inflammation may play a role in predicting clinical course. The presence of mucosal granulomas in endoscopic specimens has not been shown to influence clinical outcomes in CD patients. In contrast, the presence of mesenteric lymph node (MLN) granulomas has been associated with younger age, transmural inflammation, and postoperative disease recurrence risk.

Conclusion

Mesenteric granulomatous adenitis without intestinal involvement can be the initial presentation of CD, as noted in our patient. Prompt evaluation of competing diagnoses is warranted to ensure timely diagnosis and management.

References

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