Chronic Diarrhea Presenting as Sarcoidosis of the Colon

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Introduction

Sarcoidosis is a multisystem granulomatous disorder that can affect any organ in the body, but most commonly involves the lungs and lymph nodes. The exact cause of sarcoidosis remains unknown, but it is thought to be a result of abnormal immune system activity. While some people with sarcoidosis may experience no symptoms, others may experience fatigue, weight loss, fever, and organ-specific symptoms. Diagnosis is often made through a combination of clinical presentation, imaging, and biopsy. Treatment options include observation, corticosteroids, and other immunosuppressive agents. Despite advances in understanding the disease, there is still much to learn about the pathogenesis and optimal management of sarcoidosis.[1]

We present a rare case of a patient who had chronic diarrhea, eventually requiring a colonoscopy with biopsy results demonstrating sarcoidosis.

Case Description

62 year old female with history of hypothyroidism presented with ongoing abnormal bowel movements for 5 to 6 years. Patient describes episodes of nonbloody and non melanotic diarrhea occurring approximately 4 to 5 times a day. Despite treatment with anti-diarrheals, she had no resolution of her diarrhea. Colonoscopy was performed with biopsies taken of descending colon, sigmoid and rectum as seen in Figure 1. Pathology significant with non-necrotizing granulomas. Due to the sclerotic character of the granuloma and surrounded by bundles of collagen, diagnosis of sarcoidosis was confirmed. Patient then initiated on prednisone 20mg once a day with resolution of diarrhea. Patient received testing for angiotensin converting enzyme and computed tomography of her chest (CT) with contrast both which were within normal limits. More specifically, CT of chest with contrast demonstrated hypodense lesion at right lobe of liver which is too small to characterize and fatty infiltration of the liver.

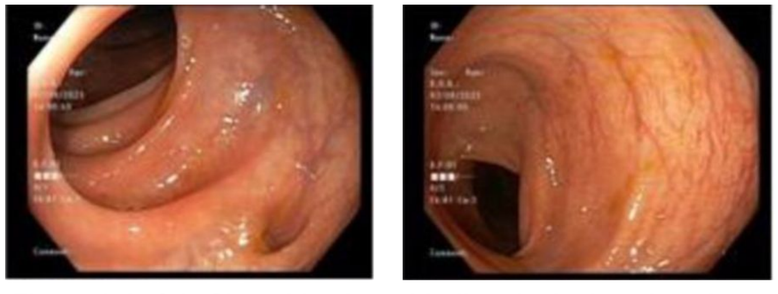

Figure 1: Left is Sigmoid colon with diverticulosis, otherwise normal and Right is transverse colon which is normal

Discussion

Sarcoidosis predominantly presents with non-specific respiratory symptoms including cough, dyspnea, fatigue and night sweats. Gastrointestinal (GI) involvement is rare, most commonly involving the stomach and less frequently involving the colon. Additionally, sarcoidosis involving the colon is difficult to diagnose prior to EGD or colonoscopy due to nonspecific symptoms. Diagnosis of sarcoidosis is made according to three non-standardized criteria. These include a consistent clinical or radiological presentation, histopathologic evidence of noncaseating granulomas, and exclusion of other diseases causing granuloma formation such as tuberculosis or fungal infection. The most common findings in systemic sarcoidosis are typically constitutional and pulmonary, in addition to possible endocrine, cardiac, neurologic or skin findings. Symptomatic GI involvement occurs in just 0.1%-0.3% of sarcoidosis cases.[2] GI involvement in sarcoidosis may present either as part of systemic disease or as an isolated finding. If GI involvement of sarcoidosis is found, concomitant pulmonary disease is likely also present, although not present in our case. Upon starting such sarcoidosis patients on corticosteroid therapy, their symptoms show improvement, including regression of obstructive lesions of the GI tract that may have been present.

It has been noted that endoscopic examination is variable for prior cases of colonic sarcoidosis. Prior cases have described it as aphthous erosions, ulcers, friable mucosa, punctate bleeding similar to colitis, plaque like lesions, and segmental narrowing.[3] This emphasizes the importance of biopsies and histology for diagnosis, especially in patients with no other symptoms of sarcoidosis.

Our patient had improvement of symptoms with corticosteroids although further research regarding treatment is needed.

Conclusion

We conclude that sarcoidosis should be considered as a differential in chronic diarrhea with biopsies taken food such patients even with normal mucosa. Further cases should be reported to further guide appropriate treatment regimen.

References

1. Baughman, R. P., Culver, D. A., Jankovic, M. R., Lower, E. E., & Gibson, K. F. (2021). Sarcoidosis. The Lancet, 397(10272), 2141-2155. doi: 10.1016/S0140-6736(21)00746-9
2. Ufondu O, Hillerson N, Shwetar MJ, et al. A Rare Presentation of Sarcoidosis Masquerading as Colonic Polyps on Screening Colonoscopy. *ACG Case Rep J*. 2022;9(6):e00800. doi:10.14309/crj.0000000000000800.
3. Daldoul S, Triki W, El Jeri K, Zaouche A. Unusual presentation of a colonic sarcoidosis. Case Rep Med. 2012;2012:169760

Acknowledgements

To Michigan State University (MSU): College of Osteopathic Medicine, Macomb University Center (MUC) site