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Gastrointestinal Bleeding Revealing Crohn's Disease after Two Years of Hémodialysis: A Case Report

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Abstract **Case Report**

Crohn's disease is a chronic inflammatory disorder of the gastrointestinal tract, characterized by segmental and transmural inflammation that may affect any portion of the digestive tract, from the mouth to the anus. In patients undergoing chronic hemodialysis, management is particularly challenging due to drug interactions and renal-related complications. We report the rare case of a 60-year-old man on chronic hemodialysis, admitted for lower gastrointestinal bleeding. Colonoscopy revealed aphthoid ulcers in the terminal ileum, cecum, and descending colon and biopsy confirmed the diagnosis of Crohn's disease. This case highlights the diagnostic and therapeutic challenges posed by the coexistence of Crohn's disease and end-stage renal disease, underlining the importance of a multidisciplinary approach to optimize clinical outcomes in this high-risk population.

Keywords: Crohn's disease, gastrointestinal bleeding, hemodialysis, multidisciplinary management.

INTRODUCTION

Crohn's disease (CD) is a chronic inflammatory bowel disease (IBD) that can affect any part of the gastrointestinal tract. Its clinical spectrum is heterogeneous, ranging from abdominal pain and chronic diarrhea to severe complications such as strictures, fistulas, and gastrointestinal bleeding. In patients with end-stage renal disease on hemodialysis, diagnosis and management are particularly complex. Gastrointestinal manifestations in these patients are often attributed to uremia, anticoagulation therapy, or more common conditions such as peptic ulcer disease and angiodysplasias, which may delay the recognition of IBD.

We describe a rare case of Crohn's disease revealed by gastrointestinal bleeding in a chronic hemodialysis patient, illustrating both the diagnostic difficulties and therapeutic implications of this dual pathology.

CASE PRESENTATION

A 60-year-old man, on chronic hemodialysis for the past two years due to an undetermined nephropathy with three sessions per week, was admitted for a two-month history of lower gastrointestinal bleeding, consisting of melena and hematochezia. This led to severe anemia requiring multiple blood transfusions.

On admission, the patient was conscious and remained stable from both hemodynamic and respiratory standpoints. He was anuric and exhibited marked pallor of the skin and mucous membranes. Abdominal examination revealed diffuse tenderness without guarding or palpable masses.

Initial laboratory investigations showed severe normocytic normochromic anemia with hemoglobin at 4 g/dL, hypoproteinemia, and a significant inflammatory response with C-reactive protein at 23 g/L. The infectious workup was negative. Abdominal ultrasound and upper gastrointestinal endoscopy did not reveal any abnormalities.

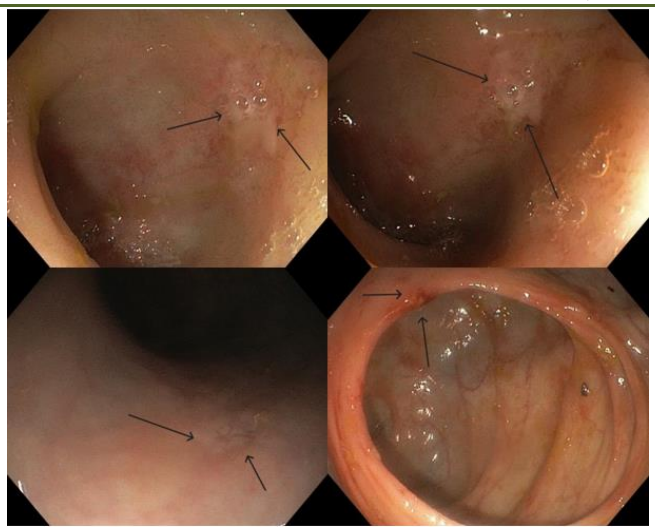

Figure: Terminal ileitis with aphthoid lesions in the cecum and left colon

Colonoscopy, however, demonstrated ulcerative and hemorrhagic lesions involving the terminal ileum, cecum, and descending colon. Histopathological examination of biopsies confirmed chronic transmural inflammation consistent with Crohn's disease. (figure)

The patient was initially managed with corticosteroids in order to control acute inflammation. Given the severity of the presentation and the need for long-term maintenance therapy, a multidisciplinary team involving nephrologists, gastroenterologists, and hematologists discussed therapeutic options. Azathioprine was subsequently introduced under close clinical and biological monitoring. The clinical outcome was favorable, marked by the resolution of gastrointestinal bleeding and stabilization of hemoglobin levels.

DISCUSSION

Crohn's disease (CD) is a chronic inflammatory disorder of the intestine that can involve any part of the gastrointestinal tract, from the mouth to the anus. In hemodialysis patients, gastrointestinal manifestations are frequent, but they are generally attributed to complications related to uremia, to the anticoagulation required for dialysis, or to more common conditions such as peptic ulcers and angiodysplasias [1]. Recent studies also emphasize that gastrointestinal manifestations in these patients are often misdiagnosed or attributed to other, more frequent causes [2].

In this particular case, the initial presentation with gastrointestinal bleeding was a rare but potentially severe clinical manifestation of Crohn's disease. Gastrointestinal bleeding is an uncommon complication of Crohn's disease, with a reported incidence ranging between 0.6% and 4% among patients with the condition [3]. In hemodialysis patients, the situation is even more complex because of disturbances in homeostasis and coagulation factors, which increase the risk of bleeding [4]. A recent review highlighted that gastrointestinal complications are often exacerbated by factors associated with chronic kidney disease [5].

Colonoscopy performed in our patient revealed ulcerations in the terminal ileum and ascending colon, orienting the diagnosis toward an inflammatory bowel disease. Histological confirmation by the presence of non-caseating granulomas was crucial in establishing the diagnosis of Crohn's disease. This type of clinical presentation, although rare in hemodialysis patients, has been described in the literature [6]. Further analysis has also shown that non-caseating granulomas are often indicative of Crohn's disease in this context [7].

The treatment of Crohn's disease in hemodialysis patients must be approached with caution. Corticosteroids are frequently used as first-line therapy to control acute inflammation, but their use must be carefully balanced with the risk of complications related to immunosuppression and vascular fragility in these patients [8]. Immunosuppressive agents, such as thiopurines or anti-TNF therapies, are also effective, but their use requires close monitoring because of the increased risk of infection in this immunocompromised population [9]. Recent guidelines recommend a cautious and personalized approach to therapeutic management in these patients [10].

Multidisciplinary care, involving nephrologists, gastroenterologists, and specialists in inflammatory bowel disease, is essential to optimize clinical outcomes. Furthermore, consideration of comorbidities associated with chronic kidney disease, such as anemia, dysregulation of calcium and phosphate, and hypertension, is crucial to tailor treatment and minimize risks for the patient [11]. Multidisciplinary consultation has been emphasized as indispensable for improving the management of patients with complex conditions [12].

The case of our patient highlights the complexity of diagnosing and managing Crohn's disease in hemodialysis patients, due to the potential interactions between the underlying pathology and the treatments required for dialysis. The unusual clinical presentation with gastrointestinal bleeding underscores the importance of considering rare but possible diagnoses in this population. The need for a personalized and rigorous follow-up in these patients becomes evident. Additional studies are required to better understand the interaction between Crohn's disease, chronic kidney disease, and associated therapies. Such research could help refine treatment protocols, identify more specific biomarkers for early diagnosis, and develop strategies to minimize the risk of complications in this vulnerable population.

CONCLUSION

This case illustrates the rarity but clinical importance of Crohn's disease presenting with gastrointestinal bleeding in a patient undergoing chronic hemodialysis. Prompt recognition and histological confirmation are crucial for diagnosis.

Management should be individualized and multidisciplinary, balancing effective disease control with the specific risks of immunosuppression and renal failure.

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