Isolated Gastric Crohn's Disease: A Case Report

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ABSTRACT

Isolated gastric Crohn's disease is a rare and often under-recognised condition. We report the case of a 34-year male who presented with epigastric pain, nausea, early satiety, and significant weight loss. Routine investigations, including imaging and laboratory studies, were inconclusive. However, esophagogastroduodenoscopy (EGD) revealed multiple superficial gastric ulcers and erosions. Biopsies taken during the procedure showed evidence of transmural inflammation and granulomas, confirming the diagnosis of isolated gastric Crohn's disease. The patient was treated initially with corticosteroids, which led to significant symptomatic improvement, followed by maintenance therapy with azathioprine to prevent relapse. This case highlights the need to include isolated gastric Crohn's disease in the differential diagnosis for upper gastrointestinal symptoms, particularly when findings are atypical or resistant to standard treatments. Early diagnosis through a combination of endoscopy and histopathology is critical for effective management. By raising awareness of this rare manifestation, it emphasises the importance of timely and tailored therapeutic strategies to improve the patient's outcomes.

Key Words: *Crohn's disease, Gastric Crohn's disease, Endoscopy, Biopsy*.

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INTRODUCTION

Crohn's disease is a chronic inflammatory bowel disease characterised by recurrent episodes of inflammation affecting any part of the gastrointestinal tract. While the most common sites of involvement are the terminal ileum and colon, it can manifest in various extraintestinal locations. Isolated gastric Crohn's disease, defined as Crohn's disease solely affecting the stomach without involvement of the small or large intestines, is a rare presentation. We present a case of isolated gastric Crohn's disease, discussing its clinical features, diagnostic challenges, and management.[1-4]

CASE REPORT

A 34-year male with no significant past medical history presented to the gastroenterology clinic with a three-month history of progressively worsening symptoms consisting of persistent epigastric pain, accompanied by nausea, early satiety, and a concerning 6 kg unintentional weight loss. There were no associated symptoms of diarrhoea, constipation, bloody stools, or changes in bowel habits. The patient denied any history of gastrointestinal illnesses or a family history of inflammatory bowel disease.

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Physical examination upon admission revealed mild epigastric tenderness, but no signs of peritonitis or palpable abdominal masses. Notably, there were no stigmata of chronic liver disease, such as spider nevi or hepatosplenomegaly. Vital signs were within normal limits, and the patient's general appearance was consistent with mild malaise due to ongoing symptoms.

The laboratory investigations showed results within normal limits, including a complete blood count, liver function tests, and inflammatory markers (white blood cell count, erythrocyte sedimentation rate, and C-reactive protein). There were no electrolyte abnormalities, and renal function was preserved. Stool studies, including cultures and microscopy, were negative for infectious pathogens, ova, or parasites.

Given the persistent and unexplained epigastric pain, an abdominal ultrasound was performed, which showed no evidence of gallstones, biliary sludge, or common intra-abdominal pathologies. The gallbladder was visualised and appeared normal in size and wall thickness. The liver, spleen, and pancreas also showed no abnormal findings.

In light of the ongoing symptoms, and the patient's unresponsiveness to empirical acid suppression therapy with proton pump inhibitors, an esophagogastroduodenoscopy (EGD) was performed, which revealed multiple, discrete superficial ulcers and erosions scattered throughout the gastric mucosa (Figure 1). The most significant involvement was observed in the antrum and corpus of the stomach. These findings raised concerns about the possibility of Crohn's disease, especially given the patient's atypical clinical presentation.

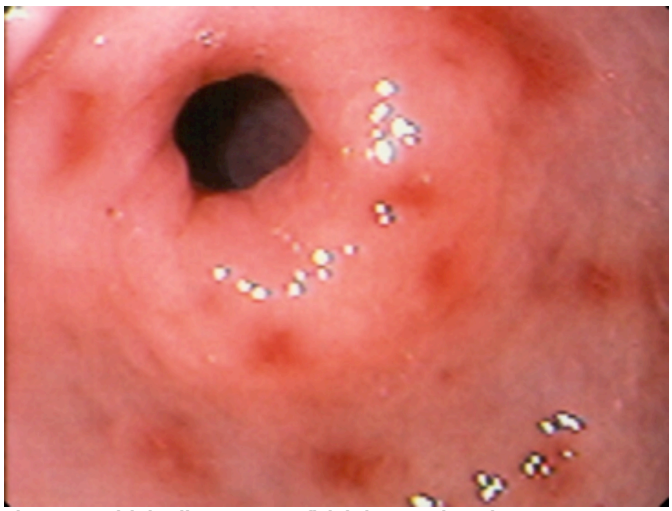

Figure 1: Multiple, discrete superficial ulcers and erosions.

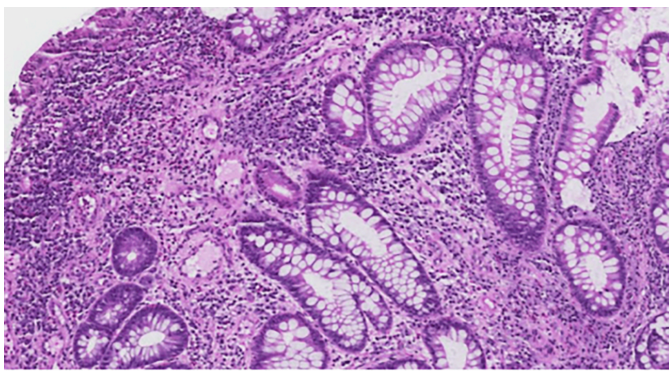

Figure 2: Transmural inflammation and lymphoid aggregates on histopathological examination.

Biopsies were obtained from the ulcerated areas during the EGD procedure. Histological examination of these gastric biopsies revealed transmural inflammation with prominent granuloma formation (Figure 2). Chronic inflammatory infiltrates and focal areas of ulceration were also noted. Importantly, there was no evidence of *Helicobacter pylori* infection in the biopsy samples.

To rule out atypical infections or other granulomatous diseases, stool cultures were performed, including testing for *Mycobacterium tuberculosis*, which returned negative. Polymerase chain reaction (PCR) testing for *Mycobacterium avium complex* was also performed on the stool samples and returned negative.

Based on the combination of clinical presentation, endoscopic findings, and histopathological evidence of transmural inflammation with granulomas, a diagnosis of isolated gastric Crohn's disease was established.

The patient was started on oral corticosteroids with prednisone at a dose of 40 mg/day. Additionally, proton pump inhibitors were prescribed for gastric protection. The patient responded well to this treatment, experiencing rapid symptomatic improvement within two weeks.

Subsequently, the corticosteroid dose was gradually tapered over several months, with continued clinical remission. To provide long-term maintenance therapy, azathioprine 150 mg/day, was introduced. The patient has been closely monitored with regular follow-up endoscopies every 12 months and clinical assessments to ensure sustained remission and to promptly address any signs of disease recurrence or complications.

DISCUSSION

Isolated gastric Crohn's disease is a rare and atypical presentation of Crohn's disease, posing significant diagnostic challenges due to the absence of the more typical small or large bowel involvement.[5] Patients often present with nonspecific symptoms such as epigastric pain, nausea, vomiting, early satiety, and weight loss, which can mimic more common gastrointestinal conditions such as peptic ulcer disease, gastritis, or gastric malignancy. This overlap in clinical presentation frequently results in delays in diagnosis or misdiagnosis, particularly when symptoms are unresponsive to conventional treatments.

The rarity of isolated gastric involvement means it is often overlooked in differential diagnoses, further emphasising the need for a systematic and thorough evaluation. Advanced diagnostic modalities such as EGD with targeted biopsies are vital for identifying specific features, including gastric ulcers, erosions, and granulomatous inflammation. Histopathological examination is crucial in confirming the diagnosis and excluding other causes of granulomas, such as infections or sarcoidosis.[6]

This case highlights the importance of maintaining a high index of suspicion and pursuing a comprehensive diagnostic approach for patients with persistent upper gastrointestinal symptoms. Early recognition and intervention can prevent complications and allow for tailored treatments, improving patient outcomes and quality of life.[7]

This case report highlights the rarity of isolated gastric Crohn's disease and emphasises the importance of considering this diagnosis in patients with upper gastrointestinal symptoms and unremarkable initial evaluations. Early recognition, a multidisciplinary approach, and appropriate treatment are essential to manage this uncommon manifestation effectively. Further research is needed to understand the pathogenesis and optimal treatment strategies for this rare subset of Crohn's disease patients.

PATIENT'S CONSENT:

Written informed consent was obtained from the patient (or their legal guardian) for the publication of this case report and any accompanying images. The patient was informed that every effort would be made to maintain confidentiality, and all identifying information has been anonymised.

COMPETING INTEREST:

The authors declared no conflict of interest.

AUTHORS' CONTRIBUTION:

SS: Conceptualisation, case analysis, and drafting of the manuscript.

SF: Literature review, critical revision of the manuscript, and final approval of the manuscript.
Both authors approved the final version of the manuscript to be published.

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