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ISOLATED GASTRIC CROHN'S DISEASE: A GROWING TENDENCY

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ABSTRACT

Isolated gastric Crohn's disease (IGCD) is a rare manifestation of Crohn's disease confined to the stomach, unlike its more common forms that primarily affect the ileum and colon. We report the case of a 25-year-old female presenting with a one-month history of epigastric discomfort and nausea, with no other significant gastrointestinal or systemic symptoms. Upper endoscopy revealed an aphthous ulceration on the greater curvature of the stomach, with biopsies showing non-caseating granulomas consistent with Crohn's disease. The diagnosis of IGCD was confirmed through a positive ASCA test and negative p-ANCA test, alongside the absence of ileal and colonic involvement. The patient was treated with prednisone for acute symptom management, followed by infliximab for long-term maintenance. Follow-up evaluations showed no significant relapse episodes. This case highlights the diagnostic challenges and management strategies for IGCD, emphasising the need for further research to optimise treatment protocols and improve long-term outcomes.

KEYWORDS

Isolated gastric Crohn's disease, non-caseating granulomas, ASCA test, p-ANCA test, infliximab

LEARNING POINTS

- This case highlights the challenges and complexities of diagnosing and managing isolated gastric Crohn's disease (IGCD), a rare manifestation of Crohn's disease confined to the stomach.
- Serological tests such as the anti-*Saccharomyces cerevisiae* antibody (ASCA) test and the perinuclear anti-neutrophil cytoplasmic antibodies (p-ANCA) test help in distinguishing Crohn's disease from other conditions.
- This case emphasises the importance of considering IGCD in patients with unexplained gastric symptoms, and the need for individualised treatment plans due to the lack of specific guidelines for IGCD.

INTRODUCTION

Crohn's disease is an inflammatory bowel disease that may affect any part of the gastrointestinal tract, but in most of the cases the ileum is involved[1]. Although the exact aetiology of the disease is unknown, it is believed to result from an immunological response with a combination of genetic and environmental factors[1]. Serological tests such as the anti-*Saccharomyces cerevisiae* antibody (ASCA)

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test and the perinuclear anti-neutrophil cytoplasmic antibodies (p-ANCA) test help in distinguishing Crohn's disease from other conditions. ASCA is more commonly positive for Crohn's disease, whereas p-ANCA is more frequently associated with ulcerative colitis, another form of inflammatory bowel disease[2]. Isolated gastric Crohn's disease (IGCD) is an uncommon variant of Crohn's disease. It presents a unique clinical challenge due to its rarity and the non-specific nature of its symptoms, which often overlap with other gastrointestinal conditions. This report describes a 25-year-old female who presented with a one-month history of epigastric discomfort and nausea, who was diagnosed with IGCD.

CASE DESCRIPTION

A 25-year-old female presented with a one-month history of epigastric discomfort and nausea for the past month. The patient denied vomiting, weight loss, fever or changes in bowel habits. She reported no recent travel, use of non-steroidal anti-inflammatory drugs (NSAIDs), or a history of similar symptoms. The physical examination was normal. Owing to the patient's persistent symptoms an upper endoscopy was performed, revealing an aphthous ulceration on the greater curvature of the body of the stomach *(Fig. 1)*. The remainder of the stomach, duodenum and oesophagus appeared normal. Biopsies taken from the aphthous ulceration showed non-caseating granulomas, consistent with Crohn's disease. An ileo-colonoscopy was performed but it showed no ileo-colonic involvement. ASCA test was positive and a test for perinuclear anti-neutrophil cytoplasmic antibody (p-ANCA) was negative. These findings confirmed the diagnosis of IGCD, given the absence of involvement of the ileum and colon.

The patient was prescribed a four-week course of prednisone 40 mg once daily to manage acute symptoms, followed by 5 mg/kg infliximab as maintenance therapy every eight weeks. The patient's disease activity was monitored during several follow-up appointments and endoscopic evaluation and showed no significant relapse episodes.

DISCUSSION

IGCD is a rare manifestation of Crohn's disease. Unlike the more common forms of Crohn's disease, which primarily affect the ileum and the colon, IGCD is confined to the stomach.

The clinical presentation of IGCD includes a variety of non-specific symptoms such as nausea, vomiting, postprandial abdominal discomfort and bloating. These symptoms may present in other gastric aetiologies such as *Helicobacter pylori* infection, tuberculosis, NSAIDs, gastritis, Ménètrier's disease, gastrinoma, collagen vascular disease and lymphoma[2]. These conditions must be ruled out to establish a diagnosis of IGCD. Serological tests can help in the diagnosis of IGCD; a positive ASCA test and a negative p-ANCA test have a high positive predictive value for Crohn's disease[2].

Endoscopy may reveal scattered ulcers and erythematous areas but in some cases the mucosa may appear normal. Biopsy results provide a definitive diagnosis of Crohn's disease by showing transmural inflammation and non-caseating granuloma[3]. The absence of involvement of the ileum and colon, as confirmed by colonoscopy or imaging studies such as computed tomography, capsule endoscopy or magnetic resonance enterography, supports the diagnosis of IGCD. Owing to its rarity and the distinct presentation of IGCD, there are no clear guidelines for its management. The therapy aims to control inflammation, relieve symptoms and prevent complications. To manage acute exacerbations and severe symptoms, prednisone 40 mg once daily is often used as an induction therapy. Azathioprine, infliximab or methotrexate can be effective for long-term maintenance therapy[4]. The long-term outcomes remain uncertain due to the absence of information in previously published case reports. Regular follow-up with endoscopic evaluation is necessary to monitor disease activity, adjust treatment as needed and prevent complications such as gastric outlet obstruction, which is reported in few cases[5]. In addition, follow-up with ileo-colonoscopy might be required as in about 10% of patients with CD, upper gastrointestinal (GI) tract symptoms precede lower GI symptoms[6].

The rarity of this condition poses challenges in diagnosis and treatment. The limited information about IGCD is derived from small case reports, and there is a need for more extensive studies to better understand this condition. Future research should focus on identifying predictive markers, optimising treatment protocols, and long-term follow-up and response to treatment.

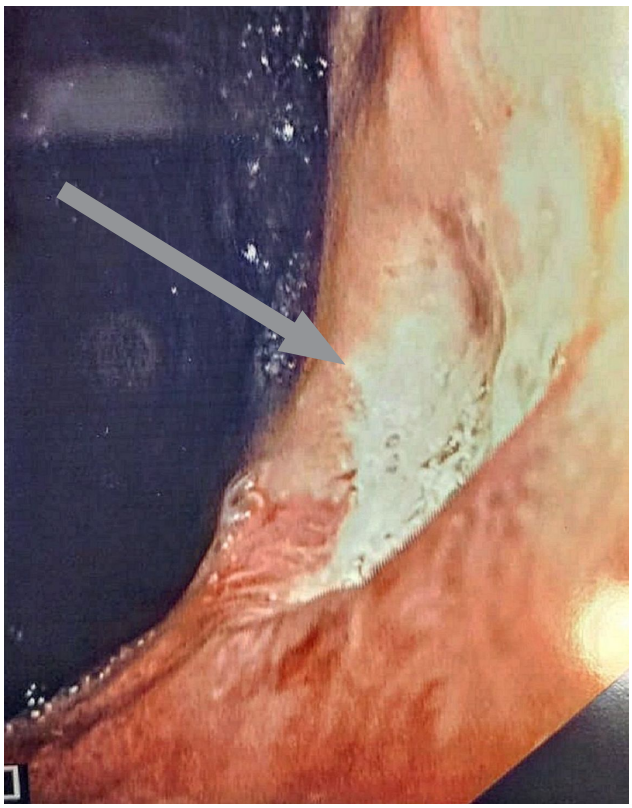

Figure 1. An aphthous ulceration on the greater curvature of the body of the stomach (grey arrow).

CONCLUSION

This case highlights the challenges and complexities of diagnosing and managing IGCD, a rare manifestation of Crohn's disease confined to the stomach. The patient's presentation of persistent epigastric discomfort and nausea was combined with the absence of more common gastrointestinal symptoms, and a normal physical examination. Endoscopic findings of aphthous ulceration with biopsy-confirmed non-caseating granulomas, along with serological tests, established the diagnosis of IGCD. Treatment with prednisone for acute symptom management followed by infliximab for long-term maintenance was initiated, and the patient's disease activity was closely monitored through regular follow-ups and endoscopic evaluations. This case emphasises the importance of considering IGCD in patients with unexplained gastric symptoms and the need for individualised treatment plans due to the lack of specific guidelines for IGCD. The prognosis for IGCD is unclear, and continuing monitoring is crucial to adjust treatment and prevent complications. This case also emphasises the necessity for further research to better understand IGCD, identify predictive markers, optimise treatment protocols and improve long-term outcomes.

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