

CASE REPORT



Upper Gastrointestinal Crohn's Disease in a Young Nigerian: A Case Report

Nasiru Altine Dankiri,¹ Abubakar Sadiq Maiyaki,¹ Isa Musa Wasagu,¹ Yusuf Dantuni,¹ Adamu Mohammad Ewa²

Abstract

Background: Upper gastrointestinal Crohn's disease (UGI-CD) is a rare manifestation of Crohn's disease (CD), particularly in sub-Saharan Africa, where diagnostic challenges and limited resources contribute to underrecognition. UGI-CD, involving the oesophagus, stomach, and duodenum, often presents with nonspecific symptoms, mimicking other disease conditions. While global data suggest UGI-CD occurs in 0.5%-13% of CD cases, reports from Nigeria remain scarce, highlighting the need for increased documentation to improve diagnostic accuracy and management in resource-limited settings.

Case: We report a 40-year-old Nigerian male farmer who presented with a three-month history of dysphagia, odynophagia, epigastric pain, and significant weight loss, in which multiple differential diagnoses were entertained. Esophagogastroduodenoscopy revealed multiple linear and oval ulcers in the oesophagus, stomach, and duodenum. Histopathology confirmed transmural inflammation, granulomas, and cryptitis, consistent with CD. Colonoscopy was unremarkable. The patient achieved clinical and endoscopic remission after nine months of prednisolone and azathioprine therapy.

Conclusion: This case underscores the diagnostic challenges of UGI-CD in resource-limited settings and emphasises the importance of endoscopic and histopathological evaluation in atypical presentations. Although access to biologics remains a concern, successful management with conventional immunosuppressants, despite their limitations, demonstrates their efficacy in improving clinical outcomes. Increased awareness and improved diagnostic infrastructure are essential for early detection and optimal outcomes in African IBD patients.

Keywords: Crohn's disease, upper gastrointestinal, dysphagia, endoscopy, Nigeria

BACKGROUND

Crohn's disease (CD) is a chronic relapsing inflammatory bowel disease characterised by transmural inflammation and may affect any part of the gastrointestinal tract, most commonly the ileocolonic region.¹ Upper gastrointestinal Crohn's disease involves the oesophagus, stomach, or duodenum and is classified as L4 disease when present as a proximal modifier to ileal or colonic involvement.

Upper gastrointestinal Crohn's disease may present with epigastric pain, nausea, vomiting, dysphagia, strictures, or rarely bleeding. Histology typically shows chronic active inflammation, with granulomas identified in a minority of cases.² Earlier adult studies reported low prevalence of UGI involvement (0.3-5%), likely due to limited use of esophagogastroduodenoscopy (EGD). However, more recent adult and paediatric data demonstrate higher endoscopic and histologic involvement.³ UGI-CD is

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associated with a more aggressive disease course, including greater risks of stricturing behaviour, hospitalisations, therapy escalation, and surgical interventions.² This underscores the importance of EGD with targeted biopsies to distinguish it from peptic or infectious gastritis.¹ In Africa, the true burden, hitherto masked by underdiagnosis and diagnostic overlap with endemic infections such as intestinal tuberculosis, is increasing. Recognition of IBD is increasing, driven by improved diagnostics, urbanisation, and changing lifestyles.⁴

Despite this progress, there remains a paucity of data on UGI Crohn's disease in Nigeria. Most local reports are single-centre and focus on ulcerative colitis or colonic CD, while inconsistent use of EGD likely contributes to underreporting of UGI involvement.^{4,5} In low- and middle-income settings, delayed diagnosis, overlap with endemic infections, and limited access to biologic therapy may increase morbidity, even though CD-related mortality is generally low with optimal care. Although Crohn's disease-related mortality is low with optimal care, morbidity remains substantial due to complications such as strictures, fistulae, malnutrition, recurrent infections, stunted growth, and a lower quality of life.^{2,5}

This case report describes an uncommon and underreported presentation of upper gastrointestinal Crohn's disease in a young Nigerian adult, highlighting diagnostic challenges and successful management with conventional immunosuppressive therapy in a resource-limited setting. It underscores the need for improved diagnostics, expanded research, and a better understanding of region-specific disease patterns in the African population, which can differ

from those in Western cohorts.

CASE REPORT

We report a 40-year-old male subsistence farmer who presents to our clinic with a three-month history of dysphagia to both solid and liquid, with associated odynophagia, non-radiating, mild to moderate burning epigastric pain, and progressive weight loss: no vomiting or regurgitation. Patient had no abdominal swelling, diarrhoea, melena, or haematochezia. No history of cough, drenching night sweat or contact with chronically coughing individuals. Patient had no oral ulcers, abdominal swelling, or yellowness of the eyes. No history of skin rashes, pains, or redness of the eyes, no joint pain or lower back pain. No history of ingestion of corrosive substances, no family history of IBD, no previous appendectomy, no cigarette smoking, and no alcohol consumption.

Examination findings revealed a young man, chronically ill looking, not pale, anicteric, no digital clubbing, lymphadenopathy or pedal oedema. Weight was 57kg. His abdomen was flat with epigastric tenderness, no palpable organs or ascites, and digital rectal examination did not reveal any significant findings. Skin examination, cardiovascular system, respiratory system, and central nervous system were unremarkable. Achalasia and oesophageal cancer were initially entertained, and the possibility of UGI-CD was remotely entertained, considering it as a less common disease in the environment.

Oesophagogastroduodenoscopy revealed multiple oval and linear ulcers involving some segment of the oesophagus (Figure 1), stomach (Figure 2), and the first part of the

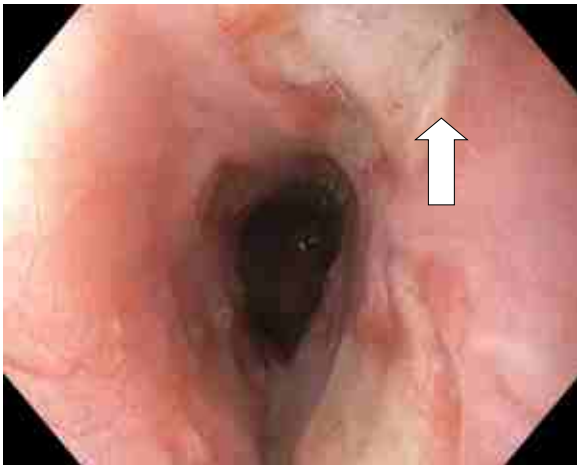


Figure 1: Showing oval and linear ulcers at the mid-oesophagus (white arrow).

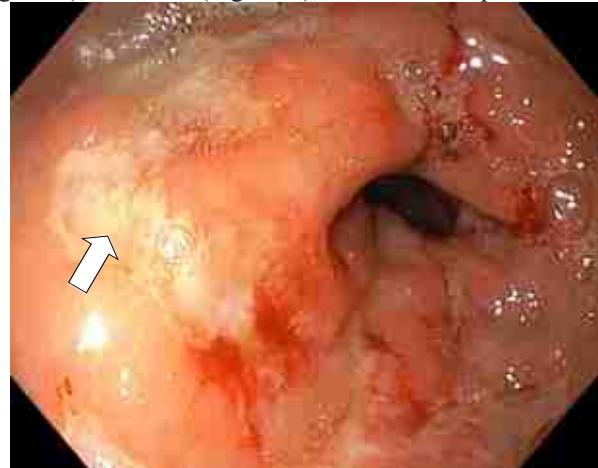


Figure 2: Showing oval and linear ulcers in the stomach (white arrow).



Figure 3: Showing normal colonic mucosa (white arrow).



Figure 4: Showing the absence of ulcers in the stomach post-treatment (white arrow).

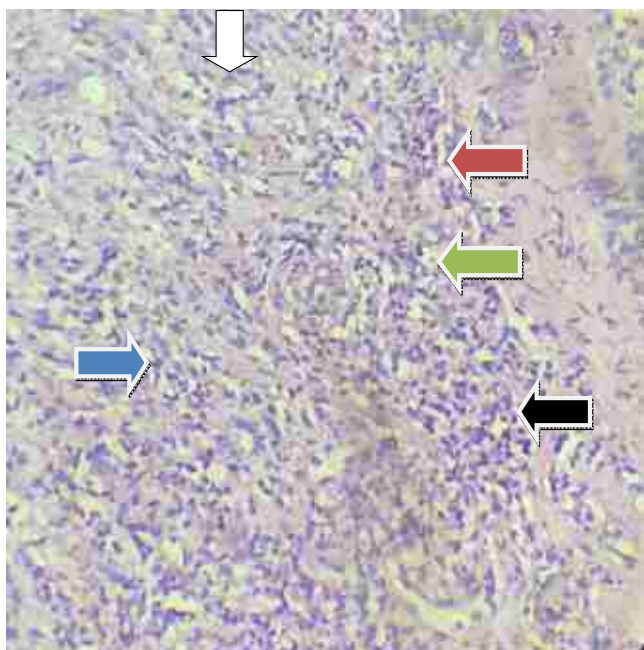


Figure 5: Photomicrograph of the stomach showing moderate inflammatory cells (white arrow), including epithelioid cells (red arrow), giant cells (green arrow), glandular distortion (blue arrow) and cryptitis (black arrow).

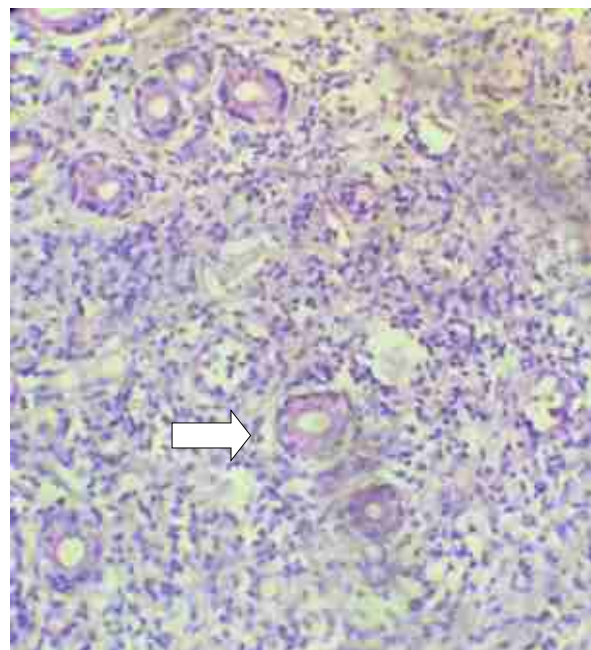


Figure 6: Photomicrograph of the stomach showing glandular distortion with inflammatory cells (white arrow).

Table I: Timeline of Patient Presentation, Diagnosis, and Management

Timeline	Clinical events	Key actions/findings
0 weeks	Onset of symptoms	Dysphagia, odynophagia, burning epigastric pain and progressive weight loss
12 weeks	Clinic presentation	Present with the above history with a weight of 57kg. Achalasia and oesophageal cancer were the primary differentials
14 weeks	Endoscopic and histologic reports available. Diagnosis of UGI-CD established. Treatment commenced	Multiple linear/oval ulcers in oesophagus, stomach, and duodenum; Histopathology: transmural inflammation, granulomas, cryptitis; ESR=88mm/hr
22 weeks	8 weeks into treatment, treatment tapering started	The prednisolone dose was gradually tapered down and completely stopped; monthly CBC and LFT are normal
38 weeks	24 weeks (6 months) on treatment	Patient is asymptomatic. Weight gain (68kg). Repeat endoscopy shows complete endoscopic healing (no visible ulcers); ESR normalised to 11 mm/hr; renal function test normal
50 weeks	36 weeks (9 months) on treatment	Patient remains in stable clinical and endoscopic remission on Azathioprine 50mg daily

CBC= Complete blood count, LFTS= Liver function tests, ESR=Erythrocyte Sedimentation Rate

duodenum; the second part of the duodenum was normal. Biopsies were taken from each segment. Histology of the biopsied samples shows transmural inflammation, non-caseating granuloma, and cryptitis in keeping with Crohn's disease (Figures 5 and 6). *Helicobacter pylori* was not detected. A colonoscopy with ilea intubation and biopsy was also performed, but no remarkable findings were noted (Figure 3). Barium meal and follow-through could not be

done; abdominal ultrasound was essentially normal. ESR was 88mm/hr; faecal calprotectin and faecal lactoferrin were not available. His blood sugar was normal, retroviral screening was non-reactive, stool microscopy was negative for bacterial pathogens, and stool genexpert did not detect *Mycobacterium tuberculosis*.

An assessment of UGI-CD was made within two weeks of

presentation. The patient was subsequently placed on prednisolone 40mg daily and azathioprine 50mg twice a day. The prednisolone was tapered and stopped within two months. Azathioprine toxicity was monitored with Complete blood count, monthly liver function tests, and renal function tests every three months, and they remained normal. Patient is now in his ninth month of starting therapy and is currently on azathioprine 50mg daily. Patient was regular on medications with no apparent side effects recorded. He has presently achieved clinical remission with no apparent symptoms within six months of starting medications, and his current weight is 68kg. His ESR after achieving remission was 11mm/hr. Repeat endoscopy was done after six months of therapy, which showed no endoscopic lesions (Figure 4).

Timeline for the patient presentation, diagnosis and management is shown in Table I.

DISCUSSION

This case was reported with ethical approval from Usmanu Danfodiyo University Teaching Hospital, Sokoto. Symptoms such as dysphagia, odynophagia, epigastric pain, and weight loss initially suggested achalasia or oesophageal cancer, reflecting the diagnostic challenge where UGI-CD is uncommon. Diagnosis was established through endoscopic identification of multiple ulcers across the upper GI tract and histologic confirmation of transmural inflammation, granulomas, and cryptitis.

This case is notable due to the rarity of UGI-CD, especially in African populations. Only 0.5% to 13% of CD cases worldwide involve the UGI, and isolated UGI-CD is considerably less prevalent.⁶ Similar to our patient, a South African report described a young adult presenting with oesophageal and gastric Crohn's disease, where dysphagia and weight loss were prominent features, mirroring the clinical presentation seen in our case.

Unlike our patient with isolated upper gastrointestinal involvement, most African reports describe Crohn's disease with concurrent ileocolonic involvement, suggesting that isolated UGI-CD is particularly rare.⁷ Diagnostic delay in this case mirrors findings from other low-resource settings, where limited access to endoscopy and histopathology contributes to underdiagnosis.⁸ Nigerian data further underscore this rarity, with Crohn's disease accounting for only 5% of IBD cases and no reported UGI involvement at presentation.⁹

This case is also notable for the absence of extraintestinal manifestations, which are reported in 25 – 40% of Western cohorts.¹⁰ These differences may reflect genetic, environmental, or immunological variation, although further study is needed. Although the histological findings of transmural inflammation and non-caseating granulomas are consistent with classic CD characteristics, the lack of *H. pylori* is noteworthy. Peptic ulcer disease is a valid differential diagnosis of upper gastrointestinal ulcers in areas like Nigeria, given the high prevalence of *H. pylori*.¹¹ The diagnosis of CD is supported by the fact that granulomas and ulcers spreading into the oesophagus are uncommon in gastritis caused by *H. pylori*.¹¹ Elevated ESR served as a surrogate inflammatory marker due to the unavailability of faecal calprotectin, a common limitation in resource-limited settings.¹²

Though optimal management of the rare UGI-CD remains

uncertain, this patient's good response to prednisolone and azathioprine aligns with established treatment approaches for Crohn's disease.¹³ A commonly used approach is azathioprine maintenance after steroid induction, especially when there are no stricturing or penetrating problems.¹⁴ Standard therapy is beneficial even in atypical phenotypes, as evidenced by the patient's weight gain (57 kg to 68 kg) and endoscopic remission after six months, which parallel outcomes reported in Western studies.¹⁵ However, a significant gap in IBD care in Nigeria is highlighted by the absence of availability to biologics, which are being utilised in refractory CD.⁴

Unlike high-income settings that favour anti-TNF combination therapy, this case showed successful remission with azathioprine alone, underscoring the need for context-appropriate treatment in low-resource environments. While long-term monitoring for complications such as strictures and fistulae remains essential, the patient's rapid clinical and endoscopic response may suggest a less aggressive disease course.¹⁶ Despite CD's progressive nature, the absence of complications at nine months is encouraging, but warrants caution. The normal colonoscopy and ileal findings further underscore the rarity of isolated upper GI Crohn's disease in Nigeria.⁵ This anatomical distribution difference may imply distinct pathogenic mechanisms, probably related to genetic susceptibility or environmental triggers, which may include dietary factors or microbial exposures.¹⁷

The patient experienced rapid improvement with treatment, noting resolved dysphagia and epigastric pain within weeks of therapy. He was relieved to have a clear diagnosis after initially fearing cancer and felt satisfied as he regained weight and resumed normal activities. Early symptom relief and supportive follow-up strengthened his confidence in long-term disease control.

The highlighted case brings to the fore the need for an upper endoscopy with targeted biopsies for patients with persistent dyspeptic symptoms, as histologic evidence of transmural inflammation and granulomas remains crucial where advanced diagnostics are limited. In addition, UGI-CD can occur without ileocolonic disease, so a high index of suspicion is needed. Early steroid induction followed by azathioprine can achieve remission. Greater awareness and improved IBD surveillance are needed in Nigeria.

Conclusion

This case illustrates the diagnostic and management challenges of upper gastrointestinal Crohn's disease in a resource-limited Nigerian setting, where presentation may mimic more common conditions. It adds to the limited African literature on UGI-CD and highlights the need for improved endoscopic capacity, heightened clinical suspicion, and context-appropriate management strategies to reduce diagnostic delays and improve outcomes.

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CONFLICT OF INTEREST

None

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Authors' Contributions

NAD was responsible for patient management, conceived the case report, and drafted the initial manuscript. ASM and ISW were involved in the clinical evaluation of the patient and data acquisition. YD performed the literature review and contributed to manuscript drafting. AME critically reviewed the manuscript for important intellectual content. All authors read and approve the final version of the manuscript.