# Isolated gastroduodenal Crohn's disease in a septuagenarian man

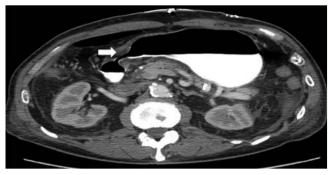


Fig. 1 Computed tomography (CT) image of the abdomen showing circumferential antral thickening (arrowhead).

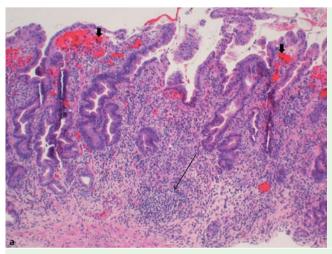
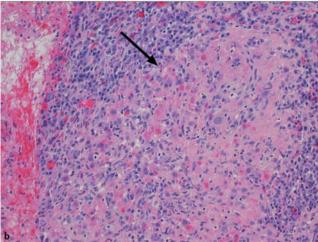


Fig. 2 Histopathological appearance of the gastric biopsies showing: a prominent lymphoplasmacytosis (arrow) with mucosal hemorrhage (arrowheads) and edema at low power (×20); b significant lymphoplasmacytosis and granuloma formation (arrow) at higher power (×40).



Isolated gastroduodenal Crohn's disease (GCD) is extremely rare. We hereby report a unique case of isolated GCD masquerading as apparent linitis plastica in an elderly man. A 78-year-old Caucasian man with an insignificant past medical history was referred to our gastroenterology service

with intractable nausea and vomiting of gradually increasing frequency over 2 years. • Table 1 summarizes the results of his laboratory tests.

Esophagogastroduodenoscopy (EGD) with push enteroscopy performed at another center had revealed ulceration and

extensive circumferential gastric wall thickening, confirmed on computed tomography (CT) scanning ( Fig. 1), which was suspicious of linitis plastica. Repeat EGD with push enteroscopy showed severe ulceration throughout the stomach and proximal small bowel. Ileocolonoscopy showed a normal appearance. Gastric biopsies showed severe ulceration with acute and chronic inflammation and granulomas ( Fig. 2). Immunostains for Helicobacter pylori, cytomegalovirus, and acid-fast bacilli were negative.

These findings were felt to be most consistent with isolated GCD. The patient was started on oral prednisone, following which his symptoms improved substantially. He was then commenced on 6-mercaptopurine (starting at a dose of 50 mg/ day and increasing to 75 mg/day) and his oral steroids were tapered off. A repeat EGD showed marked improvement in the endoscopic appearance, with marked indurated scar formation, persistent antral narrowing, and normal duodenal mucosa. The diagnosis of Crohn's disease is made through endoscopic imaging combined with histopathological confirmation. The endoscopic features of GCD include diffuse loss of vascular pattern, erythema, edema, granularity, and friability [1]. Histopathology usually reveals only inflammation; noncaseating granulomas are reported in a small fraction of patients with gastroduodenal Crohn's disease [2]. Although the gold standard for defining clinical response in Crohn's disease has been the Crohn's Disease Activity Index (CDAI), this may not apply to GCD. It has been replaced by mucosal healing as the treatment goal in recent guidelines by the American College of Gastroenterology [3]. Repeat endoscopy is therefore recommended to evaluate and guide therapy. Therapeutic data for isolated GCD are limited, although most patients have an excellent response to corticosteroids [4].

Endoscopy\_UCTN\_Code\_CCL\_1AB\_2AD\_3AC

Competing interests: None

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**Tab. 1** Results of laboratory testing in a 78-year-old man with intractable nausea and vomiting.

Test	Result	Normal range
Hemoglobin	10 g/dL	13.5 – 17 g/dL
Hematocrit	0.29	0.39 - 0.50
Aspartate aminotransferase	140 U/L	14-40U/L
Alanine aminotransferase	93 U/L	15 – 58 U/L
Albumin	1.6 g/dL	3.4 – 5 g/dL
C-reactive protein	170 mg/L	<10.9 mg/L
Serum cytomegalovirus IgM antibody	Negative	
Serum gastrin	<10 pg/mL	13 – 115 pg/mL
Serum CA19-9	17 U/mL	0 – 35 U/mL
Serum carcinoembryonic antigen	0.6 ng/mL	0 – 2.5 ng/mL
Serum gliadin IgG Antibody	<3U/mL	<11U/mL
Serum gliadin IgA Antibody	<3U/mL	<11 U/mL
Inflammatory bowel disease-specific p-ANCA antibody	30.7 EU/mL	<19.8 EU/mL
Stool calprotectin	247.8 µg/g	162.9µg/g
Tissue transglutaminase antibody	<5U/mL	<19U/mL

CA19-9, carbohydrate antigen 19-9; Ig, immunoglobulin; p-ANCA, perinuclear antineutrophil cytoplasmic antibody.

#### References

- 1 *Cheifetz AS*. Management of active Crohn disease. JAMA 2013; 309: 2150–2158
- 2 Wright CL, Riddell RH. Histology of the stomach and duodenum in Crohn's disease. Am J Surg Pathol 1998; 22: 383 – 390
- 3 Lichtenstein GR, Hanauer SB, Sandborn WJ. Management of Crohn's disease in adults. Am J Gastroenterol 2009; 104: 465 – 483
- 4 Nugent FW, Roy MA. Duodenal Crohn's disease: an analysis of 89 cases. Am J Gastroenterol 1989; 84: 249–254

## **Bibliography**

**DOI** http://dx.doi.org/ 10.1055/s-0034-1365096 Endoscopy 2014; 46: E167–E168 © Georg Thieme Verlag KG Stuttgart · New York ISSN 0013-726X

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