

Ileo-colonic infiltration in acute myeloid leukemia

A 66-year-old woman with diffuse, persistent colicky abdominal pain for the past 2 months with postprandial abdominal distension, weight loss (3 kg), asthenia, anorexia, and sporadic vomiting attended the emergency room. Blood investigations revealed hemoglobin 11.6 g/dL, platelets $82 \times 10^9/L$, C-reactive protein 135 mg/dL, and potassium 3.2 mEq/L. Computed tomography (CT) revealed thickening of the ileal wall in various intestinal loops with proliferation of mesenteric fat and increased vascularization (involving 2 cm of the terminal ileum and 40 cm of the proximal ileum), suggestive of Crohn disease. The patient's abdominal pain subsided after 3 days of antibiotics (intravenous ceftriaxone 2g once a day and metronidazole 500 mg three times a day) and an ileocolonoscopy revealed aphthous erosion in the ascending colon and edema, erythema, and three ulcers in the terminal ileum with irregular, elevated borders (● Fig. 1). Histological examination of the ileal and colonic biopsy specimens showed profuse blast-cell mucosal infiltration (● Fig. 2a). Leder staining and myeloperoxidase immunostaining (● Fig. 2b) confirmed the myeloid nature of the neoplastic cells. A bone marrow biopsy confirmed the diagnosis of acute myeloid leukemia (AML). The French-American-British (FAB) subtype of leukemia in this case was M1. The patient was started on chemotherapy according to the AML-17 protocol with a positive hematological response. She became asymptomatic and a repeat colonoscopy with biopsies showed no signs of disease involvement on histological examination.

Clinically significant extramedullary involvement of the gastrointestinal tract in leukemia is rare [1–5]. Our case is particularly unique because the diagnosis was established following colonoscopy, and serves as an alert for clinicians and endoscopists to consider rare pathologies that may clinically and endoscopically mimic more common diseases in the differential diagnosis.

Endoscopy_UCTN_Code_CCL_1AD_2AD

Competing interests: None

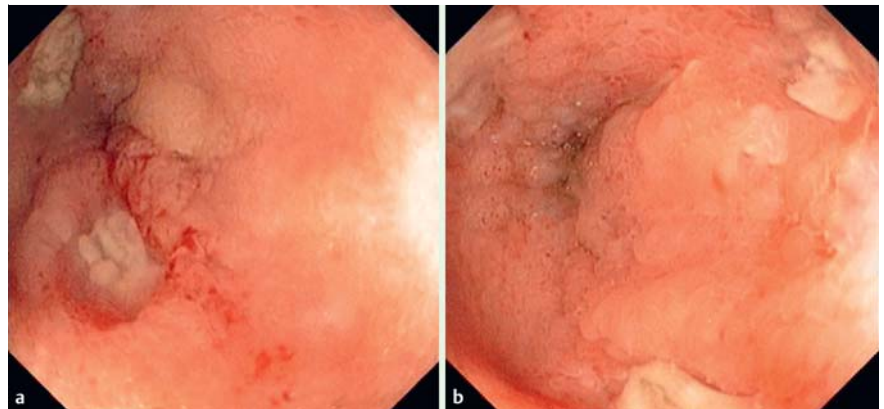


Fig. 1 a, b Colonoscopy showing ileal ulcers with elevated, erythematous borders.

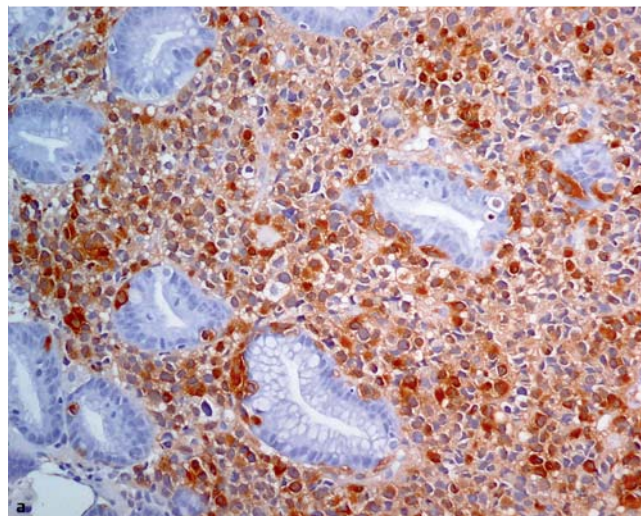
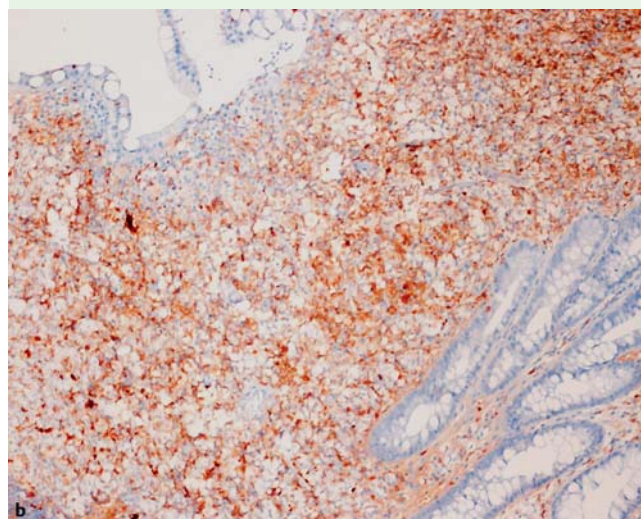


Fig. 2 a Extensive and diffuse infiltration of the mucosa by neoplastic cells (hematoxylin and eosin staining, magnification $\times 200$). b Neoplastic cells positive for myeloperoxidase (myeloperoxidase immunostaining, magnification $\times 100$).



S. Rodrigues¹, A. Ribeiro¹, R. Gonçalves¹, M. A. Sobrinho-Simões², L. Leite³, R. Duarte², E. Fonseca⁴, G. Macedo¹

¹ Department of Gastroenterology, Centro Hospitalar de S. João, E.P.E, Portugal

² Department of Hematology, Centro Hospitalar de S. João, E.P.E, Portugal

³ Department of Hematology, Instituto Português de Oncologia, Porto, Portugal

⁴ Department of Pathology, Centro Hospitalar de S. João, E.P.E, Portugal

References

- 1 *Ebert EC, Hagspiel KD.* Gastrointestinal manifestations of leukemia. *J Gastroenterol and Hepatol* 2012; 27: 458–463
- 2 *Shepherd NA.* Pathological mimics of chronic inflammatory bowel disease. *J Clin Pathol* 1991; 44: 726–733
- 3 *Barcos M, Lane W, Gomez GA et al.* An autopsy study of 1,206 acute and chronic leukemias (1958 to 1982). *Cancer* 1987; 60: 827–837
- 4 *Prolla JC, Kirsner JB.* The gastrointestinal lesions and complications of the leukemias. *Ann Intern Med* 1964; 61: 1084–1103
- 5 *Antic D, Elezovic I, Bogdanovic A et al.* Isolated myeloid sarcoma of the gastrointestinal tract. *Intern Med* 2010; 49: 853–856

Bibliography

DOI <http://dx.doi.org/10.1055/s-0032-1326109>
Endoscopy 2013; 45: E21–E22
© Georg Thieme Verlag KG
Stuttgart · New York
ISSN 0013-726X

Corresponding author

S. Rodrigues

Gastroenterology Department,
Hospital de São João
Alameda Professor Hernâni Monteiro
4200-319 Porto
Portugal
Fax: +351-225-025766
susanagrodrigues@hotmail.com