

Polypoid colon mucosa in a leukemia patient

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Introduction

A woman, followed for chronic myeloid leukaemia, presented for a routine examination. Her medical history was marked by recurrent *Helicobacter pylori* gastritis and polymyalgica rheumatica. She was under dasatinib and hormone replacement therapy. At clinical examination, she complained about digestive disorders with altered bowel habits. Biology, including leucocyte count, remained normal. A colonoscopy was performed. Endoscopic examination revealed a colonic mucosa covered by multiple tiny nodular lesions (<5mm) from the hepatic angle to the sigmoid and with an abnormal pattern of vascularisation (Fig. 1). Staged biopsies were taken.

Microscopic examination revealed discrete architectural distortions. The stroma contained a mixed inflammatory infiltrate composed of neutrophils, eosinophils and lymphocytes. Immunohistochemistry for CD3, CD5, CD20 and CD79 did not bring arguments for a lymphoma. There were no malignant or dysplastic cells (Fig. 2).

Question

What is your diagnosis?

Answer

Dasatinib treatment was stopped; control colonoscopy 5 weeks later did not show any abnormality, biopsies demonstrated a normal number of inflammatory cells and digestive complaints had disappeared

Dasatinib is an oral BCR-ABL tyrosine kinase inhibitor that is indicated for chronic myeloid leukemia treatment, particularly after development of imatinib resistance. Commonly observed adverse events include myelosuppression, transaminitis, fluid retention and gastrointestinal disorders such as nausea and diarrhea, though they are generally well tolerated.

Although lower gastro-intestinal bleeding due to haemorrhagic colitis during dasatinib treatment has been reported (1), histologically detected colitis in patients under dasatinib can remain asymptomatic (2). Such colitis can macroscopically present as mucosal erosions, exudates, congestion and/or papular or nodular lesions (1,3). We share this case to draw attention to the fact that dasatinib-induced colitis can remain asymptomatic or paucisymptomatic, even if presenting with worrisome endoscopic features.

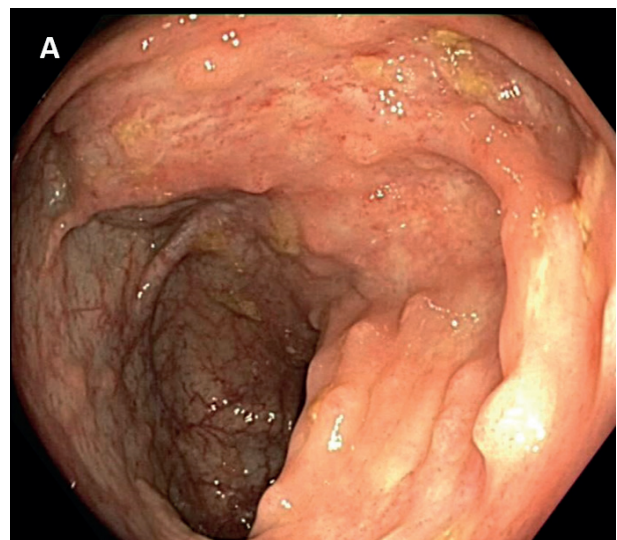


Figure 1. — At colonoscopy multiple small nodular lesions and an abnormal vascularisation pattern were observed.

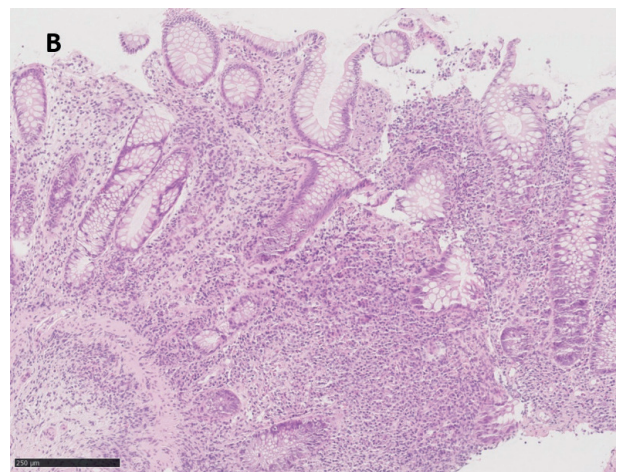


Figure 2. — Microscopic examination revealed discrete architectural distortions and a mixed inflammatory infiltrate.

Conflicts of interest

The authors have no conflicts of interest to declare.

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References

1. ERKUT M., ERKUT N., ERSOZ S., ARSLAN M., SONMEZ M. A case of acute colitis with severe rectal bleeding in a patient with chronic myeloid leukemia after dasatinib use. *Acta Haematol.*, 2010, **123**: 205-206.
2. NISHIWAKI S., MAEDA M., YAMADA M., OKUNO S., HARADA Y., SUZUKI K., *et al.* Clinical efficacy of fecal occult blood test and colonoscopy for dasatinib-induced hemorrhagic colitis in CML patients. *Blood*, 2017, **129**: 126-128.
3. PERDIGOTO D.N., LOPES S., PORTELA F., CIPRIANO M.A., TOME L. Dasatinib-induced colitis in a patient with chronic myelogenous leukemia. *GE Port. J. Gastroenterol.*, 2018, **25**: 198-200.