

Microscopic (collagenous) colitis in a patient with a heart transplant

A 62-year old female patient presented with symptoms of watery diarrhea, abdominal discomfort, and weight loss persisting for several weeks. The patient had undergone a heart transplant procedure 10 years earlier because of ischemic cardiomyopathy. Immunosuppression consisted of cyclosporin A and mycophenolate mofetil (CellCept; Genentech, South San Francisco, California, USA). Steroids had been stopped 3 months before.

The clinical examination findings were normal. Laboratory work-up showed kidney failure (serum creatinine, 2.54 mg/dL) and mild hyponatremia. The C-reactive protein level and leukocyte count were normal, whereas the procalcitonin level (0.09 ng/mL; normal <0.05), ferritin level (137 µg/L; normal 20–120), and blood sedimentation rate (42 mm/h) were slightly elevated. Results of testing for immunoglobulin A (IgA) anti-tissue trans-

glutaminase antibodies and IgA anti-gliadin antibodies were negative. Results of stool analysis, sonography, computed tomography, and esophagogastroduodenoscopy with *Helicobacter pylori* testing were normal.

A biopsy specimen from the descending duodenum showed no signs of inflammation, celiac disease, Whipple disease, or lamblia. A colonoscopy revealed mucosal edema and a diminished vascular pattern [1] (► Fig. 1). Biopsy specimens obtained from the sigmoid colon showed features of collagenous colitis (► Fig. 2), which led to the diagnosis of microscopic (collagenous) colitis. The patient was treated with budesonide [2], and her symptoms rapidly decreased. After 4 weeks, the microscopic findings were normal.

Diarrhea is common in patients with solid organ transplants and is usually attribut-

ed to infection or side effects of medication. The suspicion of microscopic colitis in a patient with a transplant is counterintuitive because immunosuppressants are effective in the treatment of microscopic colitis. Only a few cases have been reported, none of them in patients with heart transplants [3]. We cannot completely rule out gastrointestinal infection, as has been reported for lymphocytic colitis [4]. However, infection-associated collagenous colitis is unlikely. Of the possibly causative drugs, the patient's medications included a proton pump inhibitor and a statin, but no nonsteroidal anti-inflammatory drug [5]. The patient's medication was not changed during follow-up. To the best of our knowledge, this is the first report of microscopic colitis occurring in a patient with a heart transplant. Microscopic colitis should be considered when diarrhea of unknown etiology occurs in a patient with a solid organ transplant.

Endoscopy_UCTN_Code_CCL_1AD_2AD

Competing interests: None

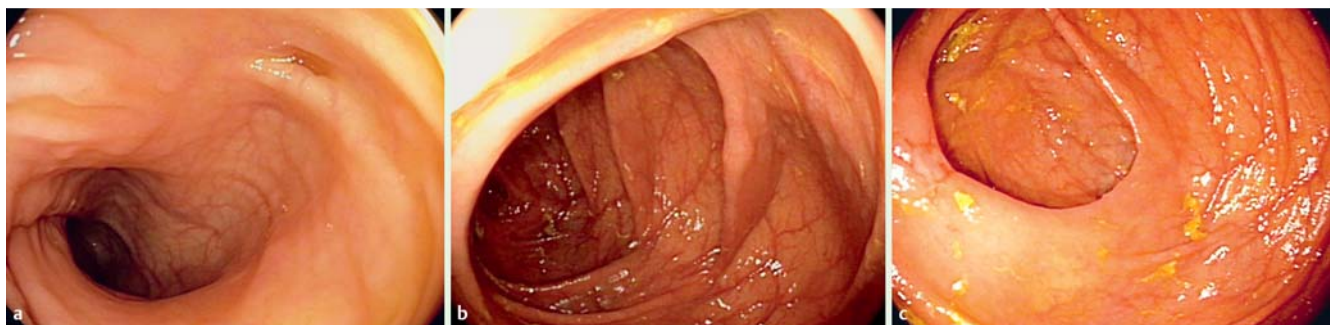


Fig. 1 During total colonoscopy performed on admission in a 62-year old female patient with symptoms of watery diarrhea, abdominal discomfort, and weight loss persisting for several weeks, focal mucosal edema and a diminished vascular pattern (a) are seen beside normal mucosa without macroscopic pathologic findings (b, c). The patient received a heart transplant 10 years earlier.

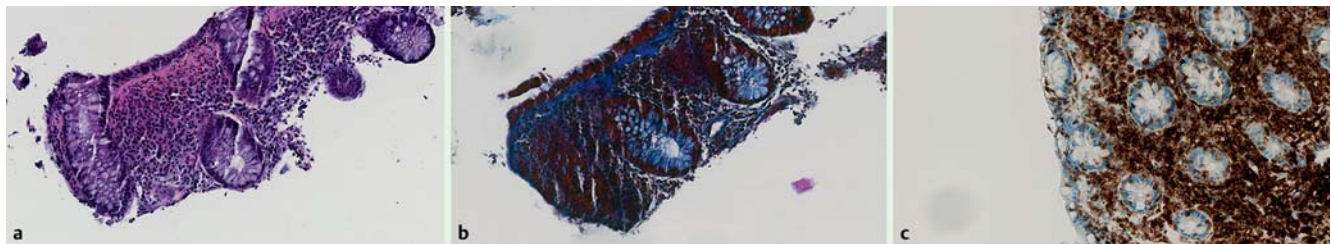


Fig. 2 a Colonic biopsy specimen showing colonic mucosa with regular crypt architecture, an increased lamina propria, lymphoplasmacytic inflammation, and intraepithelial lymphocytes (hematoxylin and eosin stain, 200-fold magnification). There are (b) marked subepithelial collagenous deposition (acid fuchsin orange G stain, 200-fold magnification) and (c) an increased number of CD45-positive intraepithelial lymphocytes (18 intraepithelial lymphocytes per 100 enterocytes is average), consistent with a diagnosis of collagenous colitis (CD45 immunohistochemistry, 200-fold magnification).

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References

- 1 Koulouzidis A, Saeed AA. Distinct colonoscopy findings of microscopic colitis: not so microscopic after all? *World J Gastroenterol* 2011; 17: 4157–4165
- 2 Münch A, Langner C. Microscopic colitis: clinical and pathologic perspectives. *Clin Gastroenterol Hepatol* 2015; 13: 228–236
- 3 Kaplan GG, Seminowich S, Williams J et al. The risk of microscopic colitis in solid-organ transplantation patients: a population-based study. *Transplantation* 2008; 85: 48–54
- 4 Weinstock LB, Kaleem Z, Gutwein MB. Cryptosporidiosis-associated lymphocytic colitis. *Am J Gastroenterol* 2013; 108: 1369–1371
- 5 Keszthelyi D, Penders J, Masclee AA et al. Is microscopic colitis a drug-induced disease? *J Clin Gastroenterol* 2012; 46: 811–822

Bibliography

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