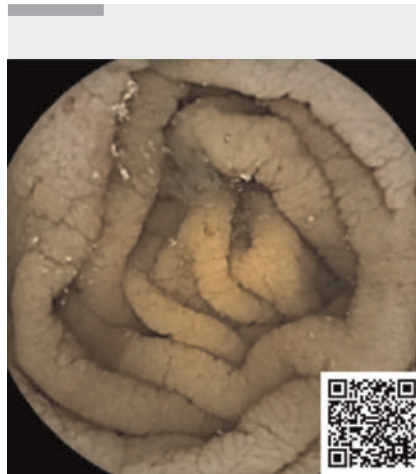
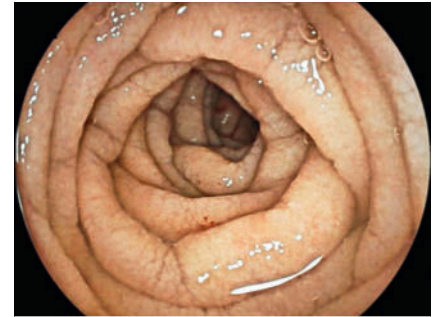


## Intestinal *Mycobacterium avium* complex infection: a rare case of small-bowel atrophy

We report the case of a 57-year-old woman with acquired immunodeficiency syndrome (AIDS) who was admitted to the emergency room with fever, diarrhea, and severe malnutrition (body mass index [BMI] 15.8 kg/m<sup>2</sup>). Her history was notable for human immunodeficiency virus (HIV) infection with poor therapeutic adherence, which had been complicated by multiple opportunistic infections. Esophagogastroduodenoscopy and colonoscopy were macroscopically normal. A video capsule endoscopy was performed, which revealed diffuse jejunal atrophy, and whitish and edematous enteric mucosa with scalloping (▶ **Video 1**). Subsequently, anterograde double-balloon enteroscopy confirmed significant signs of atrophy with scalloping and a mosaic pattern in the jejunum (▶ **Fig. 1**). Subsequent histologic examination raised the suspicion of *Mycobacterium avium* complex (MAC) (▶ **Fig. 2**), which was confirmed afterward by polymerase chain reaction (PCR). Treatment was therefore initiated with rifabutin, azithromycin, and ethambutol with clinical improvement. Disseminated MAC is an infection caused by a nontuberculous mycobacterial species [1], with this type usually associated with HIV infection; however, the wide-



▶ **Video 1** Video capsule endoscopy showing diffuse jejunal atrophy, and whitish and edematous enteric mucosa with scalloping in a patient with *Mycobacterium avium* complex disease.



▶ **Fig. 1** Image during anterograde double-balloon enteroscopy showing signs of atrophy, scalloping, and a mosaic pattern of the jejunum in a patient with *Mycobacterium avium* complex disease.

spread use of effective antiretroviral therapy and the use of prophylaxis against MAC infection have reduced the incidence of this illness [2]. This case describes a rare manifestation of an infrequent opportunistic infection that is typical of AIDS patients. In addition, we report detailed imaging and video documentation of a MAC-driven enteropathy

to support endoscopists and clinicians in their everyday practice.

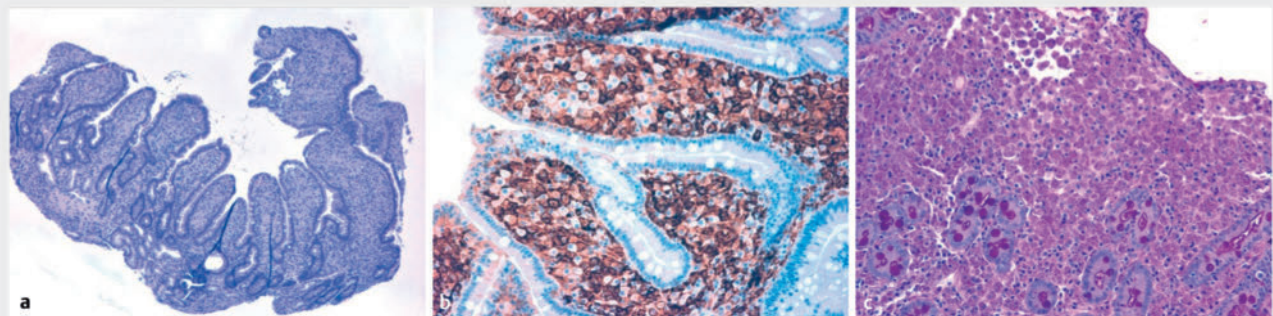
Endoscopy\_UCTN\_Code\_CCL\_1AB\_2AH\_3AB

### Acknowledgement

This study was partially funded by the Italian Ministry of Health, Current Research IRCCS.

### Conflict of Interest

The authors declare that they have no conflict of interest.



▶ **Fig. 2** Histologic appearance showing: **a** ileal mucosa with diffusely enlarged villi (hematoxylin and eosin [H&E] stained; magnification ×40); **b** ileal lamina propria filled with histiocytes (CD68 immunostaining; ×200); **c** histiocytic cytoplasm full of periodic acid–Shiff (PAS)-positive bacilli (PAS stained; ×200).

## The authors

Michael Visentin<sup>1,2</sup>, Lucia Scaramella<sup>1</sup>,  
Alessandra Bandera<sup>3</sup>, Marco Maggioni<sup>4</sup>, Luca  
Elli<sup>1</sup>

- 1 Gastroenterology and Endoscopy Unit, Fondazione IRCCS Ca' Granda Ospedale Maggiore Policlinico, Milan, Italy
- 2 Department of Pathophysiology and Transplantation, University of Milan, Italy
- 3 Infectious Diseases Unit, Fondazione IRCCS Ca' Granda Ospedale Maggiore Policlinico, Milan, Italy
- 4 Division of Pathology, Fondazione IRCCS Ca' Granda Ospedale Maggiore Policlinico, Milan, Italy

## Corresponding author

### Michael Visentin, MD

Gastroenterology and Endoscopy Unit,  
Fondazione IRCCS Ca' Granda Ospedale  
Maggiore Policlinico, Università degli Studi di  
Milano, Via Francesco Sforza 35, 20122

Milano, Italy  
michael.visentin@unimi.it

## References

- [1] Grinsztejn B, Fandinho FC, Veloso VG et al. Mycobacteremia in patients with the acquired immunodeficiency syndrome. *Arch Intern Med* 1997; 157: 2359
- [2] Palella FJ Jr, Delaney KM, Moorman AC et al. Declining morbidity and mortality among patients with advanced human immunodeficiency virus infection. HIV Outpatient Study Investigators. *NEJM* 1998; 338: 853

## Bibliography

Endoscopy 2024; 56: E755–E756  
DOI 10.1055/a-2388-7169  
ISSN 0013-726X  
© 2024. The Author(s).

This is an open access article published by Thieme under the terms of the Creative Commons Attribution License, permitting unrestricted use, distribution, and reproduction so long as the original work is properly cited.  
(<https://creativecommons.org/licenses/by/4.0/>)

Georg Thieme Verlag KG, Rüdigerstraße 14,  
70469 Stuttgart, Germany



## ENDOSCOPY E-VIDEOS

<https://eref.thieme.de/e-videos>



*E-Videos* is an open access online section of the journal *Endoscopy*, reporting on interesting cases and new techniques in gastroenterological endoscopy. All papers include a high-quality video and are published with a Creative Commons CC-BY license. Endoscopy E-Videos qualify for HINARI discounts and waivers and eligibility is automatically checked during the submission process. We grant 100% waivers to articles whose corresponding authors are based in Group A countries and 50% waivers to those who are based in Group B countries as classified by Research4Life (see: <https://www.research4life.org/access/eligibility/>).

This section has its own submission website at  
<https://mc.manuscriptcentral.com/e-videos>