Advanced endoscopic imaging of colonic schistosomiasis

A 21-year-old patient was referred to our unit with a 3-month history of abdominal discomfort, bloating, and intermittent diarrhea. Physical findings were normal; however, eosinophilia (4300/µL; 35%) was detected. Stool analysis for ova and parasites was negative. Subsequent endoscopy with extended depth of field as well as texture and color enhancement imaging (TXI) (Olympus EVIS X1 CV 1500) showed small whitish subepithelial nodules in all segments of the colon, which were especially visible in TXI mode (Fig. 1; Video 1). In addition, some nodules had a central dark spot which was clearly visible as a protruding nipple on magnified narrow-band imaging (NBI) (Fig. 2; Video 1). Histopathological analysis of snare resection specimens showed multiple eosinophilic granulomas with *Schistosoma mansoni* eggs in the lamina propria [1]. The dark “nipple” seen on endoscopy was interpreted as a granuloma on the verge of bursting and releasing parasite eggs into the intestinal lumen. Endoscopic imaging of egg release of this clarity and detail in intestinal schistosomiasis has not been published before.

A reassessment of the patient’s travel history revealed a visit to Lake Victoria in Tanzania about 1 year prior to presentation; having swum in the lake he had been infected with larvae of *Schistosoma mansoni*. After oral praziquantel treatment his symptoms resolved.

Schistosomiasis is a disease of global concern with about 250 million infections worldwide [2]. It is probably as old as mankind and is described in ancient Egyptian medical papyri [3]. Positive DNA samples have been obtained from Egyptian mummies, and the biblical story of Jericho has been linked to schistosomiasis [3,4]. With increased global travel and migration, it is important that physicians in general and endoscopists in particular should become more aware of travel-associated diseases. Modern endoscopic imaging can improve medical understanding of such diseases, especially those with gastrointestinal manifestations.

The authors declare that they have no conflict of interest.

The authors

Alanna Ebigbo, Maria Kahn, Stephan Zeilmer, Helmut Messmann
Department of Gastroenterology and Infectious Diseases, University Hospital, Augsburg, Germany
Corresponding author

Alanna Ebigbo
Department of Gastroenterology and Infectious Diseases, University Hospital, Augsburg, Stenglinstr. 2, 86156 Augsburg, Germany
Alanna.ebigbo@gmx.de

References


Bibliography

Endoscopy
DOI 10.1055/a-1252-2637
ISSN 0013-726X
published online 2020
© 2020. Thieme. All rights reserved.
Georg Thieme Verlag KG, Rüdigerstraße 14, 70469 Stuttgart, Germany