

Title:

Colon polyps with or without Schistosoma japonicum

Authors:

Youhong Cao, Chen Yuan

DOI: 10.17235/reed.2024.10813/2024 Link: <u>PubMed (Epub ahead of print)</u>

Please cite this article as:

Cao Youhong, Yuan Chen. Colon polyps with or without Schistosoma japonicum. Rev Esp Enferm Dig 2024. doi: 10.17235/reed.2024.10813/2024.

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

de Enfermedades Digestivas The Spanish Journal

## Colon polyps with or without Schistosoma japonicum

Youhong Cao<sup>1</sup>, Chen Yuan<sup>1</sup>

1. Department of Gastroenterology, Gaochun People's Hospital of Nanjing. Nanjing,

China

Correspondence: Youhong Cao. e-mail: dayouhong@163.com

Youhong Cao

Keywords: Colon polyps. Schistosoma japonicum.

Dear Editor,

A 34-year-old man was referred to our hospital for diarrhea and gastrointestinal complaints that had persisted for one year. The patient underwent a colonoscopy, which revealed multiple colon polyps (Fig. 1-2). He had no personal or family history of significance. Laboratory investigations noted leukocyte levels of 9.30 × 10^9/L (eosinophils 2.54 × 10^9/L), which was a significant abnormality. All other tests and clinical examinations were normal. An abdominal CT scan revealed liver changes consistent with schistosomiasis. The polyps were completely resected using endoscopic mucosal resection (EMR) (Fig. 3). Histopathology showed inflammatory hyperplastic polyps associated with large deposits of Schistosoma japonicum ova (Fig. 4); the remainder of the tissue was adenomatous, with no parasite eggs present (Fig. 5). The patient was prescribed praziquantel after discharge.

Schistosoma japonicum has been endemic for a long time, and associated colonic abnormalities have been sporadically reported. Most patients infected with Schistosomiasis japonicum may present primarily with acute manifestations or develop chronic complications, known as schistosomiasis liver changes, intestinal tract lesions, and involvement of other systems<sup>[1]</sup>. Interestingly, both states were observed in this patient. The acute infection manifested as a systemic



hypersensitivity reaction, characterized by elevated eosinophil levels and intestinal symptoms<sup>[2]</sup>. Simultaneously, complications of chronic infection were also present, including specific liver changes and colonic disorders.

In a retrospective study, some researchers described that patients exposed to chronic schistosomiasis may have a higher risk of adenomas and malignancies [3-4]. However, it is noteworthy that numerous eggs of Schistosoma japonicum were only detected in the hyperplastic polyps, likely due to an inflammatory and foreign body reaction, consistent with previous reports. Conversely, no parasite eggs could be found in the biopsy of the adenoma, making it difficult to determine the clinical relationship between Schistosoma infection and adenoma or whether it is merely a coincidence. Further research is needed to reevaluate whether the two are linked.

## References

- [1] Gryseels B, Polman K, Clerinx J, Kestens L. Human schistosomiasis. Lancet. 2006;368:1106-18.
- [2] Imai J, Ichikawa H, Mizukami H, Suzuki T, Watanabe N, Mine T. Colonic High-grade Tubular Adenomas Associated with Schistosoma japonicum. The Tokai journal of experimental and clinical medicine. 2016;41:22-3.
- [3] Kiyani A, Walia A, Chuang KY. Schistosoma japonicum Presenting as Colon Polyps. The American journal of medicine. 2018;131:e149-e50.
- [4] Rodriguez-Guardado A, Miquel R, Perez F, Fresno M, Corachan M. Colonic polyposis due to Schistosoma intercalatum. Transactions of the Royal Society of Tropical Medicine and Hygiene. 2010;104:443-5.

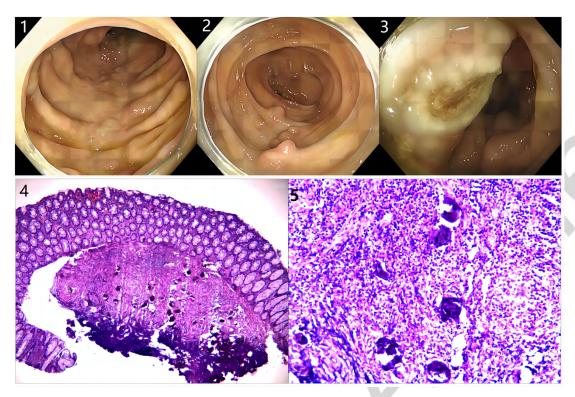


Fig 1: Colonoscopy revealed multiple polyps of the colon. Fig 2: Colonoscopy revealed multiple polyps of the colon. Fig 3: These polyps were resected by EMR, completely. Fig 4: Histopathology showed inflammatory hyperplastic polyps associated with deposited large amounts of ova of schistosoma japonicum. Fig 5: Histopathology showed inflammatory adenoma associated without any parasite eggs accompanying.