Schistosomal Rectal Polyp – An Unusual Cause of Rectal Bleeding

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Schistosomiasis is a chronic endemic parasitic disease caused by trematode blood flukes called schistosomes and affects approximately 200 million people in 74 countries. It is widely distributed throughout Africa, South America and Asia [1–3]. The five human blood flukes are *Schistosoma mansoni*, *S. japonicum*, *S. mekongi* and *S. intercalatum*, all of which involve the mesenteric and portal vessels, and *S. haematobium*, which involves the vesical plexus [1–3]. Of these species, *S. mansoni* is the most frequently and consistently reported cause of colonic manifestations, commonly presenting with colicky lower abdominal pain and bloody diarrhea secondary to a strong granulomatous intestinal response elicited by the schistosome's eggs [1–4]. Rare cases of colonic non-adenomatous polyps resulting from the above-mentioned immune-mediated granulomatous reaction have been reported in the literature, most of these being from endemic regions such as Egypt and Saudi Arabia [2,4].

In Israel, there have been sporadic reports of colonic schistosomiasis along with the North African immigration, but without involvement of colonic inflammatory polyps [5]. We report a case of an Ethiopian immigrant who presented with bloody diarrhea related to a rectal non-adenomatous polyp caused by *Schistosoma mansoni*.

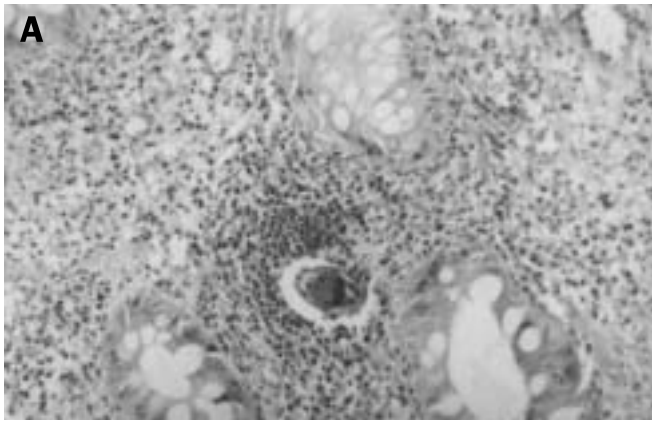
Patient Description

A 52 year old recently immigrated Ethiopian male presented to our emergency department with a complaint of bloody diarrhea, colicky abdominal pain and rectal bleeding lasting 2 days. His history was notable only for arterial hypertension. Physical examination revealed a healthy-appearing man with non-specific abdominal tenderness without peritoneal reaction signs. Laboratory analysis results, stool cultures and parasite analysis were normal. Sigmoidoscopy demonstrated a very mild congested, erythematous mucosa from the distal sigmoid colon to the splenic flexure, as well as a 1.5 cm pedunculated bleeding polyp in the rectum, which was excised and retrieved.

The histopathology results revealed schistosomal ova surrounded by prominent eosinophilic infiltrates [Figure A] and a pair of adult *Schistosoma mansoni* worms at the base of the polyp [Figure B]. The patient was promptly started on praziquantel therapy (total dose of 60 mg/kg over 8 hours), resulting in a progressive clinical resolution of the bloody diarrhea and abdominal pain. Follow-up long colonoscopy performed 3 months after completion of praziquantel treatment revealed no colonic abnormality of any kind.

Comment

Intestinal schistosomiasis is caused by chronic granulomatous lesions in the bowel wall formed as a response to a cell-mediated reaction to deposited ova. Although chronic bloody diarrhea is the main manifestation, schistosomal colonic polyps may also appear as a result of the same immune-mediated inflammatory process associated with continued egg deposi-



[A] Schistosomal ova surrounded by prominent eosinophilic infiltrates.

[B] A pair of adult *Schistosoma mansoni* worms at the base of the polyp.

tion. Cases of schistosomal colonic polyps have been reported exclusively in heavily endemic areas such as Egypt and Saudi Arabia [2,4]. Schistosomal colonic polyps mainly affect the distal colon of adult males living in heavily infected endemic areas who, as in the case reported here, present with bloody diarrhea, abdominal pain and rectal bleeding. Although schistosomiasis is not endemic in Israel, a few cases of classic colonic disease have been reported as a result of migratory populations from endemic areas. All of these cases, however, were without evidence of colonic polyps [5].

Our case represents an unusual presentation of acute bloody diarrhea caused by a single 1.5 cm pedunculated inflammatory rectal polyp conformed by ova and worms of *Schistosoma mansoni* in an Ethiopian immigrant with complete symptomatic relief following polypectomy and praziquantel therapy, as previously documented in the literature [2–4]. In view of the increased frequency of air travel and migration of populations from endemic areas with schistosomiasis, it is important that physicians be aware of the clinical and endoscopic colonic manifestations of this disease.

References

1. Ross AGP, Bartley PB, Sleigh AC, et al. Schistosomiasis. *N Engl J Med* 2002;346: 1212–20.
2. El-Garem AA. Schistosomiasis. *Digestion* 1998;59:589–605.
3. Scrimgeour EM, Daar AS. Schistosomiasis: clinical relevance to surgeons in Australia and diagnostic update. *Aust N Z Surg* 2000;70:157–61.
4. Mohamed AR, Al Karawi M, Yasawy MI. Schistosomal colonic disease. *Gut* 1990; 31(4):439–42.
5. Zamir D, Fireman Z, Shternberg A, Amar M, Weier P. Uncommon manifestations of schistosomal colitis in African immigrants. *Harefuah* 1995;129:251–3 (Hebrew).

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