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Schistosomiasis Manifesting as a Rectocolonic Calcification: A Case Report

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Abstract **Case Report**

Schistosomiasis is a rare disease with a common intestinal involvement. However, recto-colonic calcifications associated with Schistosoma have rarely been reported, especially in young people; this is the first case with the following presentation. We describe the case of an 18-year-old Moroccan woman who presented with nonspecific abdominal symptoms. Her biochemical profile was normal in addition to the results of her stool and urine tests. An abdominal computed tomography showed multiple Intraluminal calcified structures m, creating a pseudo-mass appearance This unusual case will give us the opportunity to discuss schistosomiasis, its occurrence in colon polyps, clinical significance and the various means of management.

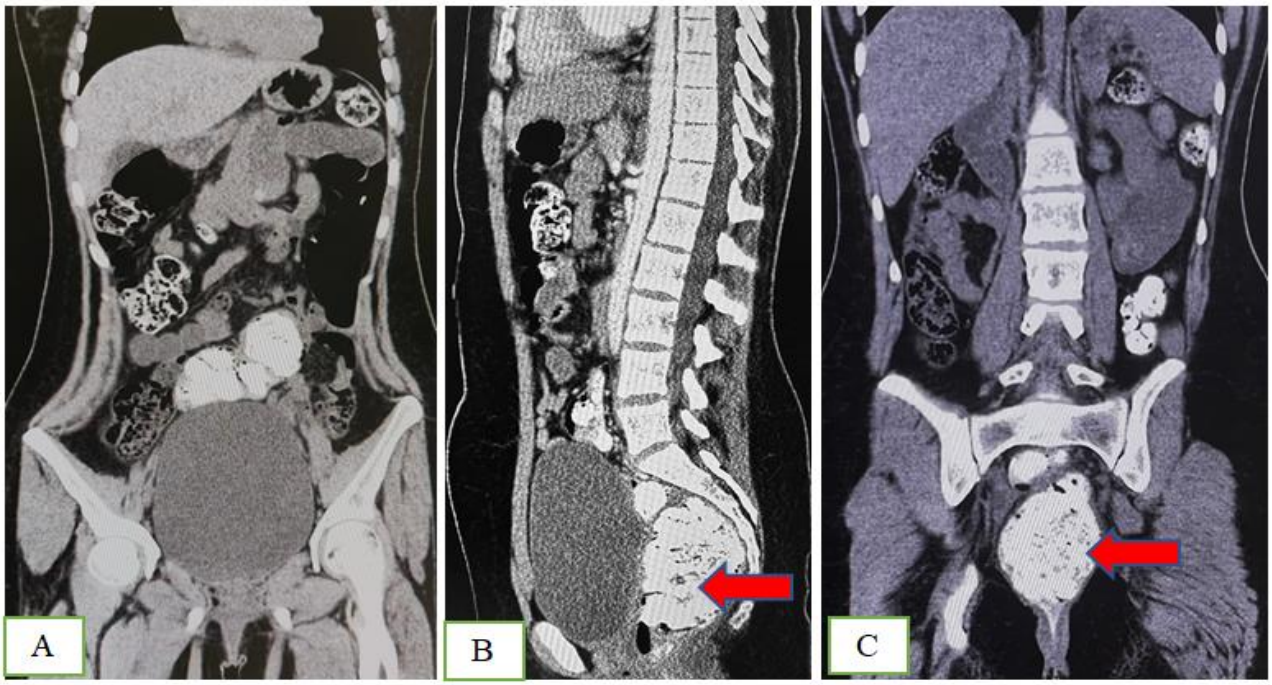
Keywords: Colonic calcifications, schistosomiasis, computed tomography.

BACKGROUND

Schistosomiasis is a chronic parasitic infection endemic in many countries. Colonic schistosomiasis is a rare disease, with no specific clinical or endoscopic findings, delaying diagnosis. Diagnosis depends mainly on histopathological analysis and treatment with anthelmintics usually resolves the infection.

CASE SUMMARY

A 18-year-old Moroccan female presented to our hospital in Marrakech, for diffuse colic abdominal pain and bloating of a couple of months duration. This was exacerbated by food intake and relieved by defecation and flatus emission. Symptoms were associated with several bouts of nausea and vomiting. Her abdomen was soft, moderately distended and non-tender with no palpable organomegaly or masses. Digital rectal examination was normal with adequate rectal tone and no masses or blood noted. She also reported constipation, she denied fever, anorexia or weight loss. Her blood profile was normal except for mild anemia, the results of her urine and stools tests were also normal. The initial computed tomography (CT) of her abdomen showed multiple Intraluminal calcified structures with an estimated density of 272 HU extending from the ascending colon to the rectal ampulla, non-enhancing after injection of contrast medium, creating a pseudo-mass appearance at sigmoidal and rectal level, locally obstructing the colonic lumen and measuring 2 cm x 7 cm x 4.5 cm and 7 cm x 6cm x 7 cm respectively (APx T xCC).



Axial (A), sagittal (B) and coronal (C) showing mural calcification within ascending, transverse and descending colon and left colon realizing an aspect of pseudo-masse of rectum (arrow) (pixel attenuation value 262 Hounsfield units) and in a curvilinear distribution within the anterior wall of rectum

DISCUSSION

Intestinal schistosomiasis results from infection by the trematode parasite Schistosoma. Intestinal schistosomiasis is a consequence of infection with the parasite Schistosoma mansoni it migrates from the portal vein to the mesenteric veins in the intestinal wall, where the main takes place [1].

The inflammatory response around the eggs leads to irregular thickening of the mucosa, formation of granulomatous polyps, and eventually fibrosis of the intestinal wall [2].

Although lesions most commonly occur in the distal colon and rectum, they can also affect the proximal colon and small intestine.

A patient with intestinal schistosomiasis develops colic, diarrhea and constipation The swollen and hypertrophic intestinal mucosa ulcerates, polypoid granulomas form in the rectum and colon.

Lehman *et al*., (1971) were the first to report intestinal calcification in S. Extensive amorphous calcification seen on the left side of on a plain abdominal radiograph showed laminar distribution adjacent and parallel to the contrast column during subsequent Baryta enema.

In addition to linear calcifications of the colon wall, these authors also described hypertrophic calcifications of the rectal mucosa converging towards the anal canal. There is infection of the hematobium, calcification of the rectum and bladder.

Fatar *et al*., (1985) reported a case in which computed tomography showed calcification in the sigmoid and rectum, but rectal calcification was not visible on plain radiograph [4, 5].

Radhakrishnan *et al*., (1988) reported a case of calcifications detected on CT scan in the liver and small intestine. Wall calcification of intestinal schistosomiasis is more likely objectified with high-contrast computed tomography than with plain radiography [6].

CONCLUSION

Schistosomiasis is a rare disease with fairly frequent intestinal involvement. However, intestinal calcifications associated with schistosomiasis have rarely been reported, particularly in young adults. Clinical and laboratory symptoms, such as endoscopic features, are nonspecific, but combined with radiological and histopathological findings, an accurate diagnosis can be made with sufficient accuracy.

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Conflicts of interests: The authors have no conflicts of interests and no financial issues to disclose.

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