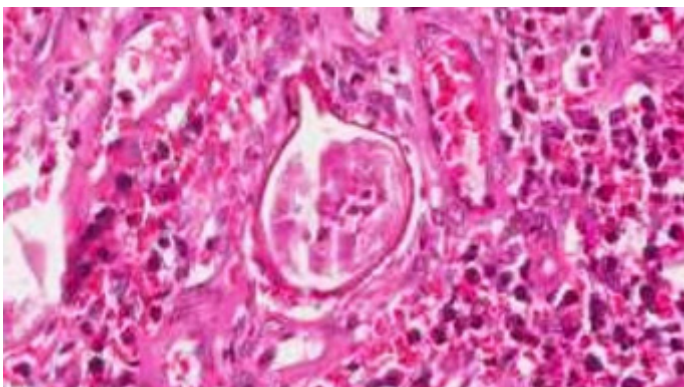
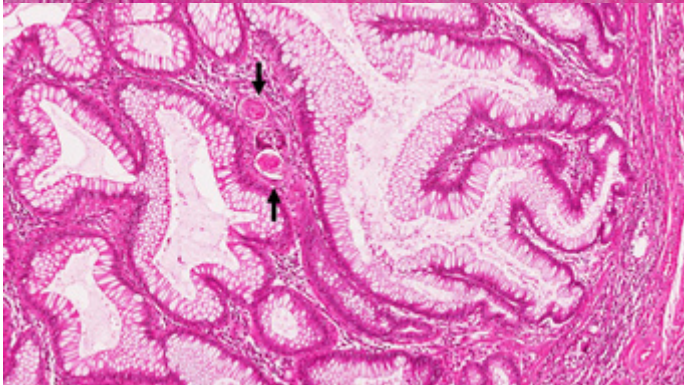
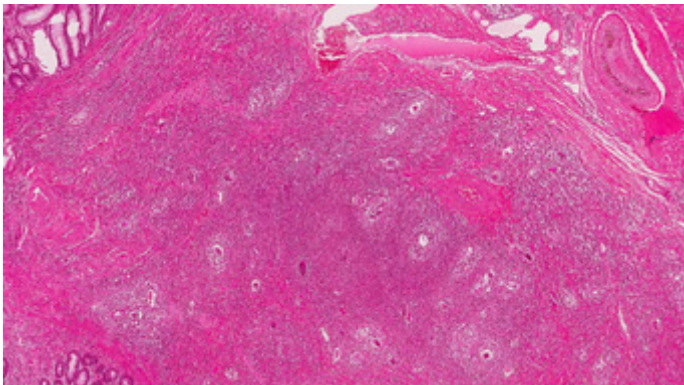
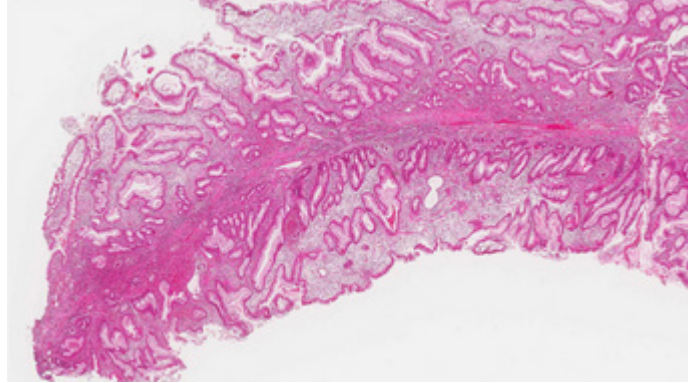
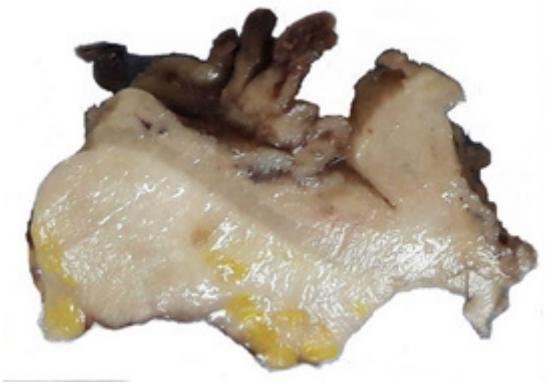
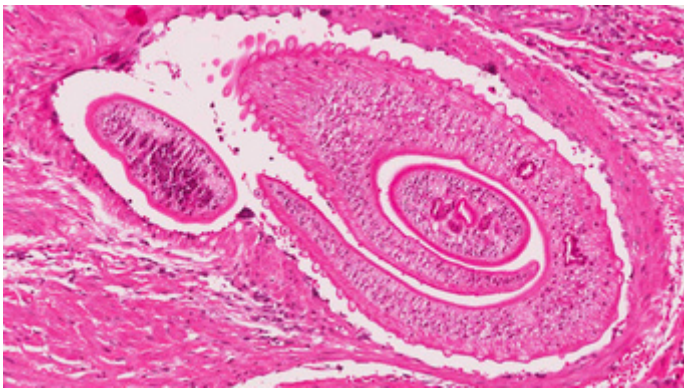


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A 19-year-old Malawian male with bloody diarrhea, polyposis of the recto-sigmoid colon, and perivisceral mass. Excision of the recto-sigmoid colon was performed.

What is your diagnosis?





Diagnosis:

Intestinal Schistosomiasis due to *S. Mansoni*.

Comment:

Trematodes *Schistosoma* that infect humans (*S. Japonicum*, *S. Hematobium*, *S. Mansoni*) can affect the gastrointestinal tract at any level, causing diarrhea (often bloody), anemia, weight loss, protein-losing enteropathy. Colon disease is due mainly to *S. Mansoni* and *S. Japonicum*: they may cause inflammatory polyposis in distal large intestine (Panel A), granularity, punctate ulcers and hemorrhages. The diagnosis requires identification of the typically shaped eggs with associated granulomatous, fibrotic, and eosinophilic reaction (Panels B and C). Relevant *Schistosoma* worm's features are residence in blood vessels, separated sexes and nonoperculated eggs. The adult worms reside in veins (in the case of *S. Mansoni* mainly in the distal large intestine) as pairs of male and female (Panel F). The male worm has prominent tuberculations (Panel F), it embraces the thinner and longer female resting in the gynecophoral canal of the male. Interestingly no reaction occurs against intravascular worms. The worms lay eggs that pass through the mucosa to be shed in the environment with the feces. The eggs of *S. Mansoni* have a distinctive, thick, lateral spine and may contain a miracidium (Panels D and E). They may induce deposition of a layer of eosinophilic material (Splendore-Hoeppli phenomenon) around them. The injury of the GI tract is caused by inflammatory reaction to entrapped eggs in the intestinal wall. Colonic fibrosis can also occur due to massive fibroinflammatory reaction and give origin to inflammatory tumors in mesentery and/or serosa (Bilharzioma). Eggs that do not pass through the intestine are carried to the intrahepatic circulation causing potentially broad portal tract fibrosis (Symmer's pipestem fibrosis). The therapy of Schistosomiasis and the prevention after exposure is based on Praziquantel (single day therapy is most often sufficient).

For further reading:

- › Binford CH, Connor DH. Pathology of tropical and extraordinary diseases. An atlas. Vol 2, AFIP, Washington DC, 1976
- › Lingscheid T et al. Schistosomiasis in European travelers and migrants: analysis of 14 years TropNet Surveillance Data. Am J Trop Med Hyg. 2017; 97: 567-74

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