RESEARCH NOTE

Colon Polyps in *Schistosoma haematobium* Schistosomiasis


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Key words: *Schistosoma haematobium* - colon polyp - Brazil

Colon polyps are not usual in schistosomiasis. The described cases are associated to mansonic schistosomiasis and rarely to *Schistosoma heamatobium* infection. The most common clinical manifestations of *S. haematobium* are in the urinary tract causing haematuria and renal failure in chronic infection. However, eventually, intestinal clinical signs may appear as first manifestation of the disease. Egypt is the country where most reports of colon polyps were published (JS Lehman Jr et al. 1970 Gastroenterology 59: 433-436, RM McCully et al. 1976 *Pathology of Tropical and Extraordinary Diseases*, Armed Forces Institute of Pathology, Washington, D.C., AW Cheever et al. 1978 *Am J Trop Med Hyg* 27: 55-75). In other African countries where *S. haematobium* are endemic severe intestinal involvement is not frequent (McCully et al. 1976 loc. cit.). In Egypt there are distinct areas where either *S. mansoni* or *S. haematobium* is predominant (HF el Sayed et al. 1995 *Am J Trop Med Hyg* 52: 194-198). In Angola, in the northern part of the country where the patient comes from, *S. haematobium* predominates. In Brazil, schistosomiasis is due to *S. mansoni* with no autoctones cases of *S. haematobium* described. The intermediate host for *S. mansoni* is the *Biomphalaria* sp. and for *S. haematobium* the *Bulinus* sp. In Brazil bulinid snails have not been found.

A patient from Angola living in Brazil for three months presented diarrhea, severe enterorrhagy, with negative proctoparasitological search for worm or ova. When submitted to colonoscopy eight bleeding rectal polyps were detected (Fig. 1). The biopsy showed high infestation with viable eggs compatible to *S. haematobium*. Adult worms were detected into the lumen of a vein in the lamina propria of the mucosa and were well preserved (Fig. 2). The eggs showed aspect compatible with *S. haematobium* with terminal spine identified when fairly preserved (Fig. 3). The inflammatory reaction was mainly due to the intense lymphocytes and plasma cell’s infiltration together with eosinophils, multiple eggs, no granuloma formation but few epithelioid cells were seen (Fig. 4). Bleeding areas were also detected. There was no urinary symptom detected. Patient cured after treatment with three colonoscopies showing no lesion. Patient did not show any further symptoms.

*S. haematobium* infections usually cause urinary involvement with haematuria due to eggs deposited in the urinary bladder and ureters. The eggs, either in digestive or urinary tract, cause focal granulomatous lesions. In severe cases abundant inflammatory infiltration and no granuloma formation are the most striking histopathological feature. In Angola intestinal granulomatous inflammation and polyps state as unusual feature of *S. haematobium* infection.

In Brazil *S. mansoni* is endemic and there are no reports on shistosomiasis haematobia. However, it is important to have in mind that individuals coming from countries where other species of schistosoma are endemic the differential diagnosis have to be done. Schistosomiasis haematobia, even with no urinary clinical signs must be considered as possible diagnosis mainly in students and military personnel returning from areas where other species of schistosoma are endemic. Another point to be considered is that shistosomiasis haematobia should be considered as possible cause of polyps in colon and rectum. Combined infection has been described causing colon polyps.
Fig. 1: bleeding polyps detected by colonoscopy.

Fig. 2: adult schistosoma worms into the lumen of mesenteric vein. Inflammatory infiltrate by mononuclear cells and eosinophils. OM. 10x.
Fig. 3: *Schistosoma* egg, with terminal spine, compatible with *S. haematobium*, surrounded by mononuclears cells eosinophils and few epithelioid cells. OM. 40x.

Fig. 4: *Schistosoma* egg with terminal spine and inflammatory infiltrate. OM. 20x.