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SHORT COMMUNICATION

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Appendiceal taeniasis presenting like acute appendicitis

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Abstract A case of parasitic appendicitis caused by *Taenia* sp. in a 28-year-old woman from Brazil is reported. Histopathological data and a description of the helminthe found in the appendix lumen are presented.

Parasitic infections still are an important health problem in developing countries like Brazil. Some helminthes infections may be involved with life-threatening complications like appendicitis. *Enterobius vermicularis* (Nackley et al. 2004; Makni et al. 1998), *Schistosoma* spp. (Doudier et al. 2004; Halkic et al. 2002), and *Taenia* spp. (Lejbkwicz et al. 2002; Duong et al. 1986; Khodjet et al. 1980; Kruskowski and Miller 1977; Payne 1970; Rousseau et al. 1969; Panzeri et al. 1965) are reported to cause disease in the human appendix.

Taeniasis is a well-known worm infection, characterized by the presence of *Taenia saginata* or *Taenia solium* in the human intestine. Human infection occurs when raw or undercooked unfrozen beef or pork are eaten. Irritation in the intestine, abdominal pain and diarrhea, sometimes accompanied with eosinophilia and fever are the most common clinical symptoms. The occurrence of *Taenia* spp. in the cecal appendix is a rare finding. There have been only isolated clinical case reports during the past 30 years (Lejbkwicz et al. 2002). The aim of the present study is to report a case of appendiceal taeniasis presenting like acute appendicitis.

A 28-year-old woman from São Paulo, Brazil, was admitted to the Hospital with 1-day history of cramping abdominal pain that latter localized to the right lower quadrant. She had no significant prior medical history. On examination, the patient was afebrile with a markedly tender abdomen with rebound tenderness and guarding. The leukocyte count was 11,000/mm^3 with 7,315/mm^3 neutrophils. She underwent exploratory laparotomy that showed an inflamed appendix that was removed. Pathologic examination of the resected appendix revealed a fragment of helminthes body in appendix lumen (Fig. 1) together with lymphoid hyperplasia of the mucosa and a suppurative inflammation involving the entire thickness of the appendiceal wall.

Parasitological analysis of the material revealed that the fragment of helminthe was a proglottid segment, which presented elongated and flattened, with 4.3 mm wide and 1 mm high. Its uterus was filled out with eggs (Fig. 2), with 37.4 μm in diameter. They were round or subspherical, with a thick radially striated shell. Inside each shell there was an embryonated oncosphere with six hooks. These characteristics allowed to conclude that the helminthes was one specimen of the genus *Taenia*. However, the eggs of *Taenia* spp. are indistinguishable morphologically, so it was not possible to determine if the species infecting the appendix was *T. saginata* or *T. solium*.

After the surgery, the patient was treated with albendazole (400 mg/day during 3 days) and this treatment was repeated 21 days later.

In conclusion, the present report reinforces the importance to recognize parasitic infections in the differential diagnosis of acute abdominal distress, because the clinical management of these infections is different from that for appendicitis. Timely appropriate therapy would prevent invasive procedures to solve the problem.

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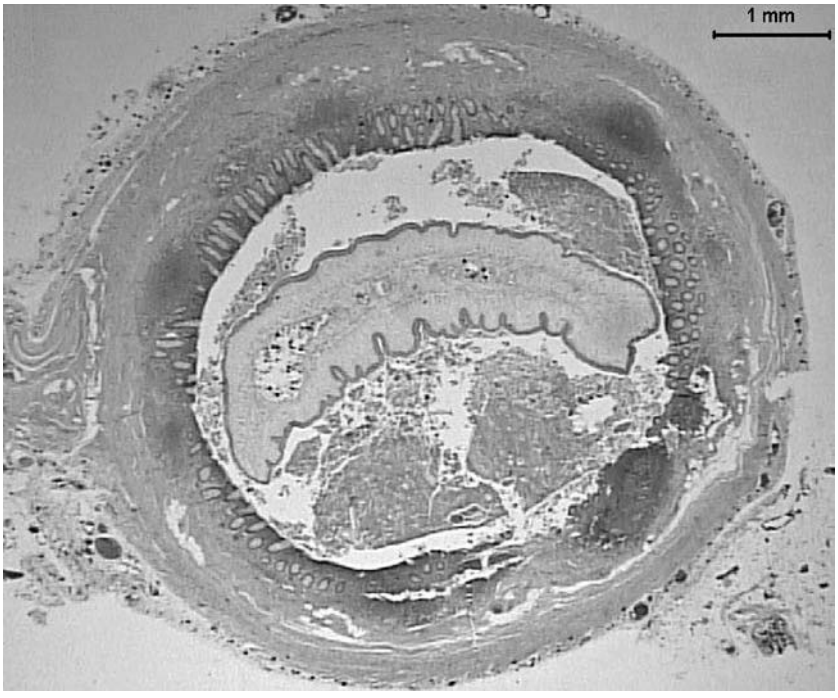

Fig. 1 Histhological section of the appendix showing a *Taenia* sp. proglottid segment in the lumen and lymphoid hyperplasia

Fig. 2 Detail of the *Taenia* sp. eggs inside the proglottid found in the appendix

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