

An unusual cause of acute appendicitis in New Zealand

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Clinical presentation

Sixty-one year-old female from the Philippines, presented with right iliac fossa pain consistent with appendicitis. USS suggested appendicitis but raised the possibility of hepatic lesions. CT was requested, confirming the diagnosis of acute appendicitis without any significant liver disease (Figure 1).

The patient proceeded to an uncomplicated laparoscopic appendicectomy and was discharged the following day.

Histology revealed acute inflammation with parasitic organisms in the appendix wall (Figure 2) consistent with schistosomiasis.

Discussion

Schistosomiasis is a disease caused by trematode worms. WHO estimated that 61.6 million people were treated for schistosomiasis in 2014¹ while closer to 260 million

received prophylactic treatment. That said, this is a disease of tropical and sub-tropical countries with poor sanitation and not common in western society.

There are five main types of schistosomiasis. *Schistosoma* (S) *Mekongi*, *S. Guineensis*, *S. Mansoni*, *S. Japonicum* and *S. Haematobium*. The latter tends to lead to urogenital disease while *S. Mansoni* and *S. Japonicum* are frequently associated with intestinal disease.² The eggs cause an intense granulomatous inflammatory response leading to complications such as periportal fibrosis, gastrointestinal ulceration, obstruction and bleeding.¹ In countries where schistosomiasis is endemic, acute appendicitis secondary to the parasitic infection is not uncommon. Reports suggest it will be found in approximately 2% of appendicectomy specimens in Nigeria.²⁻⁴ In the US, a large retrospective review of 1,690 appendicectomies found schistosomes in only in 0.2% of the specimens.⁵

Figure 1: CT coronal reconstruction showing appendicitis (green arrow).

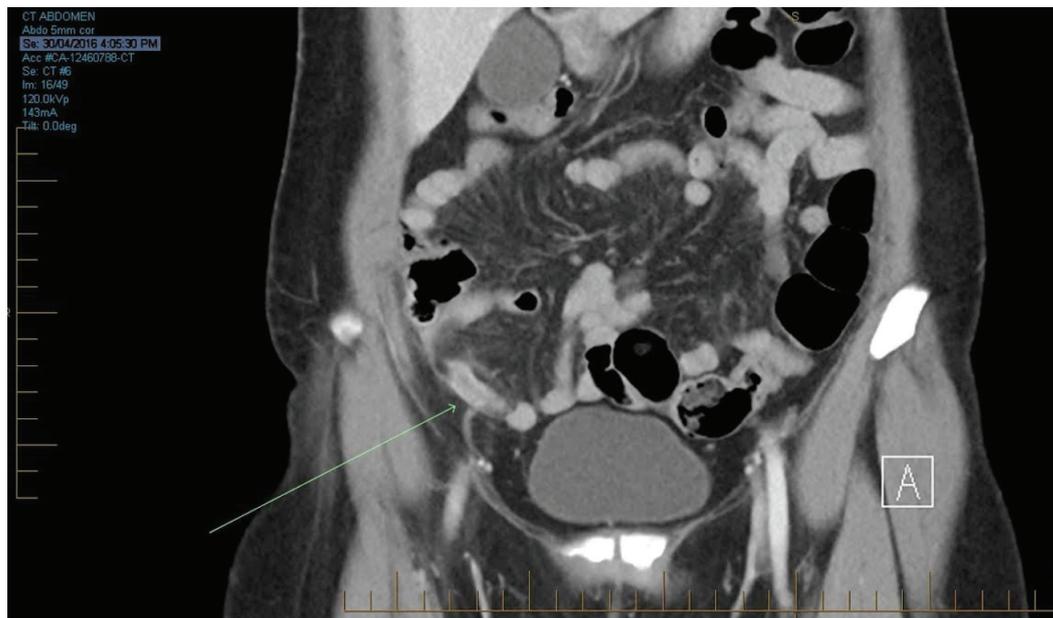
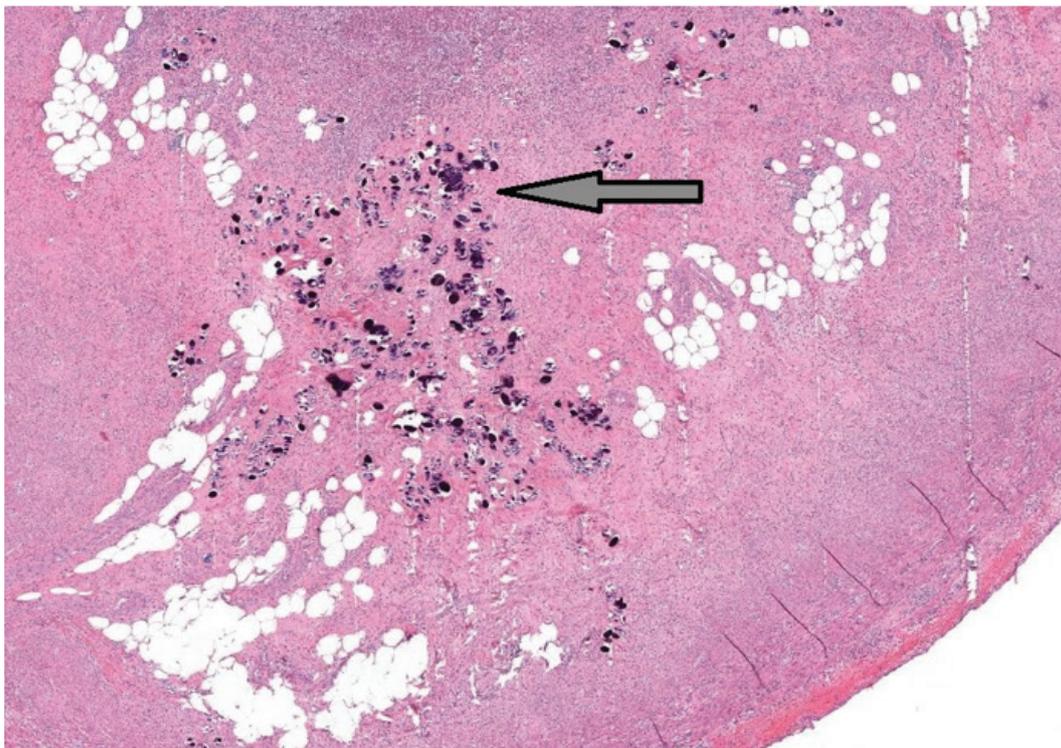
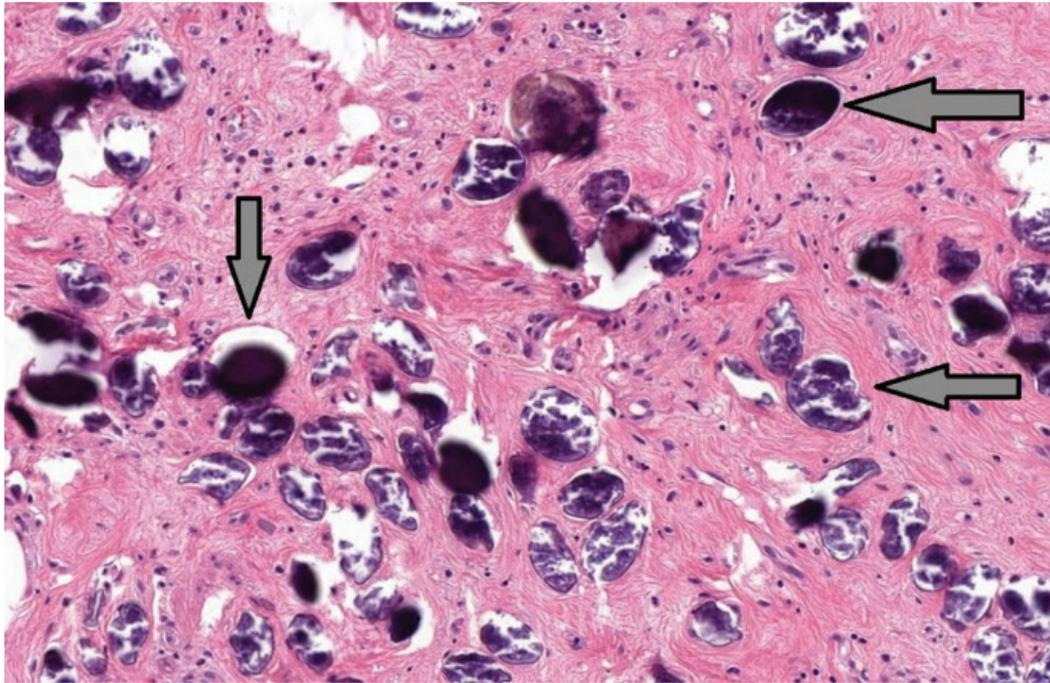


Figure 2: H&E staining showing schistosomiasis (arrows).



While schistosomiasis remains rare in western societies, there is increasing movement within populations due to both immigration and travel. We must therefore

remain vigilant about travel history and the potential for infectious diseases in our patients. Treatment with antihelmethics such as Praziquantel is highly effective.¹

Competing interests:

Nil.

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<http://www.nzma.org.nz/journal/read-the-journal/all-issues/2010-2019/2017/vol-130-no-1448-13-january-2017/7127>

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