Acute abdominal pain and diarrhoea in healthy adult

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DESCRIPTION

An adult woman presented with 2 weeks of mild fatigue followed by 1 day of acute abdominal pain and explosive watery diarrhoea. Upon finding an object from her anus, slow extraction revealed a tape-like structure (see figure. 1). Although living in the mid-west USA, she has travelled throughout the Middle East and sub-Saharan Africa as well as frequently consuming raw fish. The specimen identified as *Diphyllobothrium latum*, known as the broad tapeworm because the proglottids of this worm are broader than they are long (arrow figure 1B) as opposed to *Taenia* genus tapeworms. The parasite is acquired through the consumption of sparganum stage (plerocercoid larva) found in raw fish, when released attaches to the intestinal lining and mature in some cases for years.[1 2] Diagnosis can be made by the identification of eggs or portions of the adult parasite shed in the stool or by visualisation by endoscopy.[3] Prolonged infection can lead to B_{12} deficiency through scavenging of this vitamin by the parasite. This patient was given a single dose of praziquantal, the preferred therapy for diphyllobothriasis.

Figure 1 (A) Specimen of *Diphyllobothrium latum* expelled from patient described is estimated at least 200 cm in length and is a partial specimen in that the head of the worm was not found and remained in the patient's intestinal tract along with an additional portion of the worm. Inset in (B) shows close-up of wide proglottids that are characteristic of this genus (black arrow).

Learning points

- *Diphyllobothrium* infection is associated with the consumption of raw freshwater fish.
- Patients can be asymptomatic, present with abdominal pain and/or diarrhoea and/or megalobastic anaemia.
- *Diphyllobothrium* is morphologically distinguished from other tapeworms by the presence of wide proglottids and an extremely long adult stage.

Competing interests None.

Patient consent Obtained.

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REFERENCES

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