

# Anisakiasis: a growing cause of abdominal pain!

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## DESCRIPTION

A previously healthy man, aged 32 years, was admitted with severe epigastric pain, vomiting and low-grade fever since the previous week. On physical examination, he had moderate abdominal tenderness. Laboratory results showed mild leucocytosis. After a careful interview, he revealed that he recently ate sushi. An upper gastrointestinal endoscopy was performed and showed on the gastric body, a filiform parasite firmly attached to an area of swollen and hyperaemic mucosa, with its end penetrating the gastric mucosa (figure 1). The larva was removed with a Roth net and the patient's symptoms resolved immediately (figure 2). Microbiological analysis showed the larva belonged to *Anisakis* spp.

Anisakiasis is a zoonosis caused by nematode parasites of the genus *Anisakis*.<sup>1</sup> It is caused by the consumption of contaminated raw or undercooked fish or seafood.<sup>2</sup> Most of the cases were described in Japan due to food habits; however, it has been increasingly recognised in Western countries.<sup>2-3</sup> Patients can have allergic symptoms like angioedema, urticarial and anaphylaxis.<sup>1</sup> Gastrointestinal symptoms include abdominal pain, nausea and vomiting and complications like digestive bleeding, bowel obstruction, perforation and peritonitis can also arise.<sup>1</sup> Patients can have a low-grade fever.<sup>1</sup> A severe leucocytosis can be present, but peripheral eosinophilia is rare.<sup>3</sup> Three clinical patterns of the gastrointestinal tract involvement were described and all of them can mimic an acute surgical abdomen: (1) gastric acute form in which endoscopic removal of the larva is a curative treatment;<sup>1-2</sup> (2) intestinal form with an acute or chronic presentation, a more challenging diagnosis



Figure 2 The larva was removed with a Roth net.

and classically surgically treated;<sup>1-3</sup> (3) ectopic subtype with peritoneal cavity involvement.<sup>2-3</sup>

## Learning points

- ▶ Owing to changes in food habits, anisakiasis is a growing disease in Western countries, which should be suspected in patients with a history of ingestion of raw or uncooked fish.
- ▶ Anisakiasis can mimic an acute surgical abdomen.
- ▶ Endoscopy plays an important role in the diagnosis and treatment of gastric anisakiasis.

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**Competing interests** None declared.

**Patient consent** Obtained.

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## REFERENCES

- 1 Shimamura Y, Muwanwella N, Chandran S, et al. Common symptoms from an uncommon infection: gastrointestinal anisakiasis. *Can J Gastroenterol Hepatol* 2016;2016:5176502.
- 2 Bucci C, Gallotta S, Morra I, et al. Anisakis, just think about it in an emergency. *Int J Infect Dis* 2013;17:e1071-2.
- 3 Ortega AR, Torres MA, Frutos CG, et al. Gastrointestinal anisakiasis. Study of a series of 25 patients. *Gastroenterol Hepatol* 2003;26:341-6.

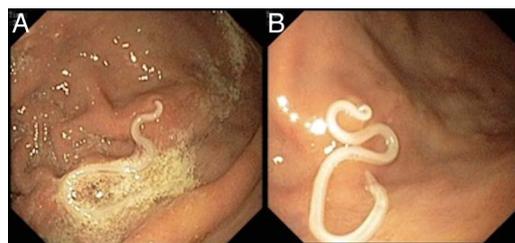


Figure 1 A parasite firmly attached to an area of swollen and hyperaemic mucosa, with its end penetrating gastric mucosa, was seen on the gastric body in an upper gastrointestinal endoscopy.



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