A rare case of food poisoning by Kudoa hexapunctata

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DESCRIPTION

A 32-year-old man was admitted to our hospital at midnight with vomiting and diarrhoea after eating *sashimi* for dinner. On physical examination, his abdomen was flat and tender with weak peristalsis, but no rebound tenderness or abdominal rigidity. He was febrile with a temperature of 38.2° C. Blood tests revealed an elevated white cell count $(16\times10^{9}/L)$, with all other parameters, including C-reactive protein, within the normal range. The fever, vomiting and diarrhoea resolved within 24 hours.

Spores of *Kudoa* species were detected in a stool culture.

Kudoa's spores are surrounded by three or more shell valves that are symmetrically radial, each having one polar capsule. The suture line where the

Figure 1 A spore surrounded by three or more shell valves, symmetrically radial, with a polar capsule each, detected in a stool culture.

shells meet is often indistinct (figure 1). PCR testing confirmed the presence of *Kudoa hexapunctata*, a mucus sporozoite that is found in bluefin tuna (especially young bigeye tuna); it was taxonomically separated from *Kudoa neothunni* (which is found in yellowfin tuna) and other species since tuna is their primary host. *Kudoa* food poisoning is associated with the consumption of raw fresh fish, such as sashimi. It manifests as diarrhoea and vomiting within 12 hours of eating the contaminated food and usually resolves within 24 hours. ²

Learning points

- ► *Kudoa* food poisoning is associated with raw fresh fish consumption.
- ► It manifests as diarrhoea and vomiting within 12 hours of eating the contaminated food.
- ► It usually resolves within 24 hours.

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