

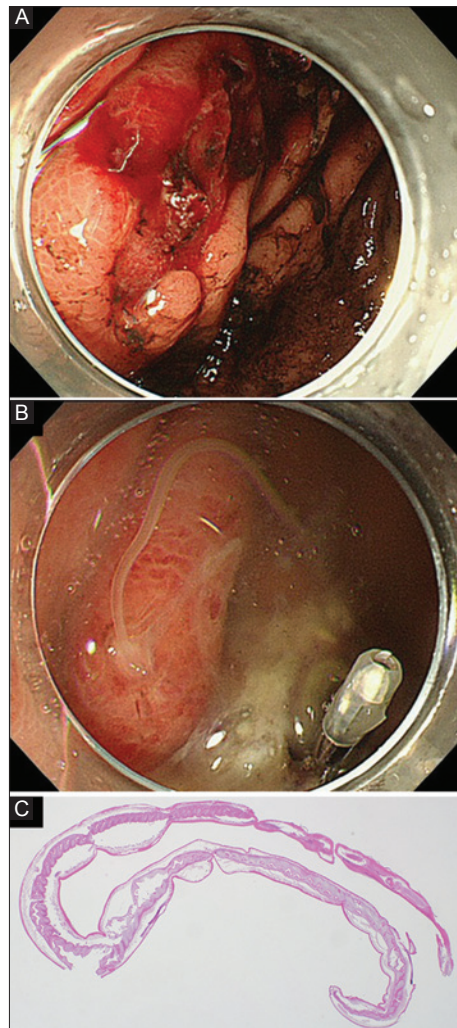
## A bleeding gastric ulcer caused by anisakiasis

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A man in his 70s presented to the emergency unit for hematemesis. His recent blood test showed normal liver and renal function, and serum anti-*Helicobacter pylori* (*H. pylori*) IgG antibody was negative. He took neither steroids nor non-steroidal anti-inflammatory drugs (NSAIDs). Emergency endoscopy revealed a bleeding gastric ulcer in the greater curvature of the gastric body (Fig. 1A). Endoscopic hemostasis was performed using a combination of hemoclips and soft coagulation using hot biopsy forceps. Next day, second-look endoscopy revealed an *Anisakis* larva (Fig. 1B) on the edge of the ulcer. The larva was removed with biopsy forceps (Fig. 1C). He said that he ate pickled mackerel fish 5 days before hematemesis.

Anisakiasis is a human parasitic disease caused by eating undercooked or raw fish such as cod, salmon, herring or mackerel infected with third-stage *Anisakis* larvae [1,2]. Endoscopic appearance includes erythema, erosions, ulcerations, and submucosal tumor-like mass [2]. However, the incidence of bleeding gastric ulcers is low at 0.5% [3]. As Japanese dishes become popular around the world, consumption of raw fish food, sushi or sashimi, is increasing. We should be aware that anisakiasis can be a cause of non-*H. pylori* and non-NSAID peptic ulcer and bleeding.



**Figure 1** (A) Emergency endoscopy revealed a bleeding gastric ulcer in the greater curvature of the gastric body. (B) Second-look endoscopy revealed an *Anisakis* larva on the edge of the ulcer. (C) Histological examination showed the whole longitudinal body of an *Anisakis* larva

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### References

- Oshima T. Anisakiasis - is the sushi bar guilty? *Parasitol Today* 1987;3:44-48.
- Madi L, Ali M, Legace-Wiens P, Duerksen DR. Gastrointestinal manifestations and management of anisakiasis. *Can J Gastroenterol* 2013;27:126-127.
- Goto Y, Takahashi N, Yoshimitsu M, Matano Y. A case of gastric anisakiasis with hemorrhagic gastric ulcer and ulcerative scarring [Article in Japanese]. *Nihon Shokakibyō Gakkai Zasshi* 2014;111:2021-2024.