Multiple Gongylonema pulchrum worms in a human esophagus

A 42-year-old man was admitted to our hospital with chest congestion of 1 month’s duration. He had no medical history. After physical and hematological examination revealed no abnormalities, gastroscopy was recommended. Endoscopy showed two white wormlike objects, 3 cm long, adhering to the esophageal mucosa at 32 cm from the incisors (Fig. 1 a, Fig. 1 b). The worms were also viewed on narrow-band imaging (Fig. 2 a, Fig. 2 b). They were removed in one piece with a biopsy forceps and placed in normal saline (Fig. 3). Parasitologists and pathologists at our hospital confirmed that the objects were Gongylonema pulchrum. No worm was found in the patient’s oral cavity. After the worms had been removed, the patient’s symptoms decreased in a few days, and 3 months later, no parasite was found during a second endoscopic examination. The patient has always lived in Beijing and never traveled abroad. He works as a waiter in a restaurant, and his living environment is relatively poor. He also likes to drink unboiled water. Gongylonema pulchrum is a heteroxenous parasite found in the upper gastrointestinal tract of many ruminants. Embryonate eggs pass in the feces and are swallowed by coprophagous insects, which are the intermediate hosts. The definitive host becomes infected through the ingestion of larvae [1]. The accidental transmission of Gongylonema pulchrum to humans is due mostly to unsanitary conditions. Adult worms may remain as parasites in the human body for 1 year, sometimes up to 10 years [2].

Hypereosinophilia is infrequent. Removing the worms manually with the fingers or a forceps is the most effective treatment, and the symptoms will disappear without further treatment. The administration of antibiotics or the local application of an antiseptic may facilitate worm migration in the mucosa.
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References
1 Sato H, Une Y, Takada M. High incidence of the gutlet worm, Gongylonema pulchrum, in a squirrel monkey colony in a zoological garden in Japan. Vet Parasitol 2005; 127: 131 – 137

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