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Medical Imagery

‘Tingling throat syndrome’ as asymptomatic anisakiasis following conveyor belt sushi consumption in Tokyo

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A 15-year-old Japanese boy presented to the hospital after finding a worm in his sputum. He had eaten conveyor belt sushi (tuna, yellow tail, and whelk) 3 days earlier. He complained of throat discomfort during the night and discovered the moving worm (Figure 1, and Supplementary Video clip) in his sputum. He had no symptoms, including abdominal pain. No abnormalities were found on physical examination or laboratory evaluations. The worm was confirmed to be *Anisakis simplex* by DNA sequencing. Approximately 20,000 anisakiasis (AS) cases has been reported annually in the world, and over 90% of cases were reported from Japan followed by Spain (Bao et al., 2017). Over 95% of AS cases are associated with abdominal pain due to the invasion of the gut wall following the consumption of raw fish. In this case, it is suspected that ‘Tingling throat syndrome’ (Sakanari and McKerrow, 1989; Centers for Disease control and Prevention, 2019) which is a rare asymptomatic AS caused by Anisakis, derived from infected meal, that appeared in sputum or oral cavity following cough or discomfort of the laryngopharynx. Due to the globalization of foods, the risk of contracting AS by consuming raw fish should be recognized by clinicians worldwide (Bao et al., 2017). AS can be underdiagnosed and misdiagnosed.

Figure 1. Moving *Anisakis simplex* in sputum on the tissue paper.

Declarations of interest

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Ethical approval

The ethical approval is not required.

Author details

Yutaro Hara; Collect data, describe draft manuscript.
Yasuyuki Morishima; Perform a DNA sequence to confirm of *A. simplex*.
Tomonori Uruma; Collect data in a part, and prepare organism for DNA sequence.
Yuji Hirai; Assist to description, English edits, Total direction.

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Appendix A. Supplementary data

Supplementary material related to this article can be found, in the online version, at doi:https://doi.org/10.1016/j.ijid.2019.03.019.

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