TROPICAL DERMATOLOGY

SPARGANOSIS IN A JAPANESE PATIENT MANIFESTING FIFTY YEARS AFTER INFECTION

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Background: Sparganosis is a foodborne parasitic infection caused by a pseudophyllidean tapeworm larva of the genus Spirometra. Humans are infected by the ingestion of raw meat from an infected intermediate host, such as snake, frog, soft-shelled turtle, chicken or wild boar. The roe of some freshwater fishes, such as loach, also has the possibility of transmitting sparganosis infection. Other infection routes are the consumption of water containing infected water fleas of the genus Cyclops and the transmission of the plerocercoid from raw flesh's contact with open wounds. Meat and fish are commonly eaten raw in Japan, so sparganosis sometimes occurs.

Observation: An 86-year-old Japanese man presented with an itchy nodule on the left back. The patient had a history of having eaten raw snake and raw frog about 50 years earlier. Physical examination revealed a solitary subcutaneous nodule of 1.3 cm in diameter on the left back. Excisional biopsy was performed, but the larva was not visible to the naked eye. Histopathological study revealed calcareous corpuscles in the larva and dense lymphohistiocytic inflammatory infiltrates with granuloma. Serological examination by enzyme-linked immunosorbent assay revealed antibody positivity for Spirometra erinaceieuropaei. Molecular investigation identified the etiological agent as Spirometra decipiens, rather than Spirometra erinaceieuropaei. He had been removed two larvas surgically.

Key message: Sparganosis cases are reported worldwide and are most common in Asian countries. The infection can manifest decades after the ingestion of the infected intermediate host, as in the present case. Molecular analysis of sparganosis has been reported for a couple of years, but the details, such as the difference of distribution, are unknown. Recently, Japanese cuisine became a UNESCO cultural heritage and Japanese food is gaining popularity in many countries. Dermatologists around the world should be aware of the possibility of sparganosis in clinical practice.