THE SECOND CASE OF HAIR WORM, GORDIUS SP. (NEMATOMORPHA) VOMITED FROM HUMAN BODY IN JAPAN

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ABSTRACT: A human case of Gordius sp. vomited from a two-year-old girl was reported. This is the second case in Japan.

Gordius is a worm belonging to Nematomorpha. The adult worm of Nematomorpha passes the stage of free living in fresh-water or sea-water. However, Gordiacean larvae are parasitic to the body cavity of some insects, especially Orthoptera and Coleoptera or marine crustacea.

Regarding human cases of this worm over 20 cases have been reported in the world (Kagei et al., 1966). In Japan, one case was reported by Kagei et al. in 1966, namely, one female specimen of Gordiid worm was vomited from a child patient, 5 years old, in Gifu Prefecture. This is the first report in Japan. Further detection of other case has been expected. Two months after Kagei’s discovery, one human case was detected by authors, namely, one female specimen was vomited from a girl. After close examination this was identified as a kind of Gordius sp. belonging to Gordioidea. This is the second human case in Japan.

MATERIAL

The patient was a two-year-old girl in Iwaki City, Fukushima Prefecture. Since the 20th of March, 1966, she suffered nausea several times daily. She showed signs of pulling out something from her gullet with her fingers. Still in the same condition, she moved to Shirahama town, Chiba Prefecture on the 1st of April. In

Fig. 1. Gordius sp. vomited from a two-year-old girl, whole shape, wilted by drying.

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the afternoon of the 5th of April, she vomited a worm with a large quantity of saliva mixed chocolate eaten just before. The worm lived about 30 minutes after its appearance.

CONSTRUCTION

The worm was examined 21 days after discharge. As a result of unsuitable preservation the worm had wilted, so the shape was changed a little. The body is long and slender, measuring 41 cm round during its lifetime. The cloacal opening is situated in the center of posterior end and points to backward. Internal organs have not been observed.

DISCUSSION

By the characteristic signs above-mentioned, such as the long and slender body, thick cuticular layer, absence of appendages on the anterior tip and lack of segments, this worm was identified as long, 1.6 cm broad at the thickest portion (Fig. 1). The color of the body is brownish yellow, anterior tip is whitish and has a slight depression in center. The depression seems to correspond to the rudimentary mouth (Fig. 2). Close to the whitish colored portion exists a black brownish colored part 1 mm long. The body surface is covered with cuticle of about 50μ thickness. The papillae, processes and reticulate fleck are not recognized on the cuticle (Fig. 3). Pseudosegmentation is manifested through out total body except the anterior and posterior end. The pseudosegmentation is narrow on the anterior portion of the worm and with on the other portion. Most of the pseudosegmentation continue in a circular fashion around the worm, but some are incomplete. The posterior end is flat as if depressed, but not
bifurcated. This portion was probably Order Gordioidea, Class Nematomorpha, Phylum Aschelminthes. As the cuticle is single this worm belongs to Family Gordiidae. Only one Genus is included in this Family, so the worm was determined as *Gordius* sp. By the position of the cloaca it is evident that the worm is female. On the other hand, *Gordius* is classified by the construction of the male worm, consequently, the specific name could not been determined.

Invasion of *Gordius* into the human body is considered as a kind of migration (INOUE, 1962). The patient has the habit of licking everything. Probably, she must have eaten something infected with *Gordius* larvae.

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**LITERATURE**


**RESEARCH NOTE . . .**

**Research on the metacercaria of Paragonimus westermani in Izu Peninsula**

At one time, Izu Peninsula was a *Paragonimus westermani*—infected area in Kanoto district, namely, the metacercariae of this fluke were discovered in high percent in the crabs caught in the rivers of this district. In June 1967, authors made an investigation on the crabs in same rivers, and found that the infection rate was on the decrease. That is to say, from the twenty *Eriocheir japonicus* and sixty *Potamon dehaani* in the River Aono no metacercariae were discovered. In the same river SUZUKI discovered in 1958 in high percent of 64.5% the metacercariae of *Paragonimus westermani* from *Eriocheir japonicus*. On the other hand, from one large *Eriocheir japonicus*, 10cm body breadth, metacercariae of *Paragonimus westermani* were discovered ca. 30 in number, but from seven small same no metacercariae were found. This is nothing as against the result obtained by SUZUKI in 1958, namely, he discovered in 68.3% from the same crabs. In the River Kano, this time, from two *Eriocheir japonicus* and six *Procambarus clarkii* no metacercariae were discovered. In the same river in 1959, OKADA discovered the metacercariae in 60%.

As mentioned above it is the fact that the number of infected crabs is on the decrease but not disappear completely.

Further, authors researched the *Sesarma dehaani*, 13 in the River Aono and 12 in the River Iwashina, but no metacercariae of *Paragonimus ohirai* were discovered.

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