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BRIEF COMMUNICATION

A CASE OF ABDOMINAL ANGIOSTRONGYLIASIS IN A MONKEY

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A male crab-eating macaque, *Macaca irus* (estimated age over 3 years), imported on August 31, 1976 from Malaysia into Japan, was killed and autopsied on the 18th day of quarantine. The animal had manifested diarrhea. Histological examination revealed a large number of nematode eggs and larvae in the serous and muscular layers, as well as in the lamina propria mucosae of the caecum (figs. 1 & 2). The larvae and eggs were found in the foci surrounded by fibrous adventitious tissue. The larvae were recovered from the formalin-fixed material of the caecum (fig. 3, tab. 1). A portion of the mesentery was carefully examined under the dissection microscope, but no adult worm was found. Since the eggs and larvae were found in all layers of the caecum, it was inferred that they had been distributed via the mesenteric artery.

TABLE 1 *Comparison of the measurement of first stage larvae (L) obtained from a crab-eating macaque with those of Angiostrongylus species parasitic in the mesenteric artery (mm)*

	L FROM CRAB-EATING MACAQUE (4 specimens)	L OF *A. siamensis* (20 specimens)	L OF *A. costaricensis* (20 specimens)
Body length	0.27 ~0.29	0.24 ~0.28	0.22 ~0.25
Body width	0.013~0.016	0.014~0.017	0.012~0.014
Esophagus length	0.11 ~0.13	0.11 ~0.13	0.11 ~0.12
Tail length	0.026*	0.024~0.026	0.019~0.026

* Only one specimen was measured

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It has been reported that *Angiostrongylus costaricensis* and *A. siamensis* are parasitic in the mesenteric artery. The present histopathological findings agree with the above report. *A. costaricensis* is mainly distributed in Central America and is parasitic in rodents as well as human beings, causing abdominal angiostrongyliasis characterized by intestinal granuloma.[1,4–7,10] Recently, two marmoset (*Saguinus mystax*) cases of abdominal angiostrongyliasis caused by *A. costaricensis* were reported.[9] *A. siamensis* was recovered from rats of the genus *Rattus* by OHBAYASHI and co-workers during their parasitological survey of micro-mammals in Thailand.[8] Mice, jirds and cotton rats can be experimentally infected with this parasite.[2] Up to date, *A. siamensis* is the only nematode known to be parasitic in the mesenteric artery of hosts in Southeast Asia.

The morphology of the first stage larvae recovered from the present case was identical to that of the genus *Angiostrongylus* (tab. 1).[3] Therefore, the present case conjectured to have been provoked by *A. siamensis* or an allied species. These findings warrant that increased attention be paid to the occurrence of human cases in Southeast Asia in the future.

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EXPLANATION OF PLATE

PLATE I

Fig. 1 Lesion of the caecum H.-E. stain

Fig. 2 Magnification of fig. 1 showing larvae and eggs

Fig. 3 First stage larva obtained from the caecal wall