



Title	MIGRATION AND DEVELOPMENT OF ANGIOSTRONGYLUS COSTARICENSIS AND A. SIAMENSIS IN MICE FOLLOWING ORAL, INTRAPERITONEAL, SUBCUTANEOUS AND INTRAVENOUS INFECTION
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Citation	Japanese Journal of Veterinary Research, 33(1-2), 85-85
Issue Date	1985-04-30
Doc URL	http://hdl.handle.net/2115/2340
Type	bulletin (article)
File Information	KJ00002374312.pdf



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MIGRATION AND DEVELOPMENT OF *ANGIOSTRONGYLUS COSTARICENSIS*
AND *A. SIAMENSIS* IN MICE FOLLOWING ORAL, INTRAPERITONEAL,
SUBCUTANEOUS AND INTRAVENOUS INFECTION

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The effect of infection route on recovery rate and organ specificity of *Angiostrongylus costaricensis* and *Angiostrongylus siamensis* was experimentally demonstrated. The recovery rate of the worm from the mice inoculated orally was higher than that from the mice inoculated intraperitoneally, intravenously and subcutaneously. After oral and intraperitoneal inoculation, more than 90 per cent of *A. costaricensis* and *A. siamensis* were located in the pancreas and the mesentery, the normal definitive habitat of both parasites. On the other hand, after intravenous and subcutaneous inoculation, only half of the worms were located in the mesentery, and a number of worms were recovered from abnormal habitats such as the kidney, the lung, the heart, etc. In order to elucidate the differences in the definitive habitat, the development and the migration route of *A. costaricensis* in mice following subcutaneous infection was studied. The 3rd and 4th molts occurred in the subcutaneous tissue at 3 to 5 and 5 to 7 days after inoculation, respectively. Early 5th stage worms migrated and entered the arteries and the veins in the subcutaneous tissue at 7 to 10 days after infection. The worms, which entered the vein, reached the heart and the lung, and were then carried to the various organs by systemic circulation. Thereafter they developed to maturity mainly in the mesentery, the kidney, the heart and the subcutaneous tissue. Although the intermediate development site and definitive habitat of *A. costaricensis* which were inoculated parenterally were different from those inoculated orally, the angiotropic character of the adult worm remained unchanged. These observation on parenteral migration route also predicted for *A. siamensis*.