FATE OF CYSTICERCI OF *TAENIA CRASSICEPS* FOLLOWING ORAL INFECTION IN SMALL MAMMALS

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Cysticerci of *Taenia crassiceps*, which was isolated in Japan, were administered by gavage into mongolian gerbils (*Meriones unguiculatus*), ICR mice and red backed voles (*Clethrionomys rufocanus bedfordiae*).

Worms were recovered from the small intestine up to 11 days postinfection (PI) in gerbils, 2 days in mice and 11 days in voles. The highest recovery rate and fastest development, as evidenced by the formation of the testes primordia at day 7 PI, were observed in the gerbils. But at day 11 PI, only destrobilated worms were recovered from the gerbils. No development of the worms was observed in the intestine of mice for 2 days PI. In voles, only a few worms with genital premordia were recovered from the intestine at day 6 PI.

The worms penetrated the gut wall into the peritoneal cavity in all three host species during the first stage of infection. Some worms survived in the peritoneal cavity during the experimental period ; gerbils and mice for 60 days, and voles for 11 days. Occasionally, a few non-evaginated or reinvaginated worms were seen throughout the experimental period in all three host species. In voles, most worms did not develop during the experimental period (11 days), but some detached proglottids were recovered at day 11 PI. Worms recovered from the peritoneal cavity of gerbils and mice had undergone segmentation and developed into a stage possessing vaginal primordia. After their development in the peritoneal cavity of gerbils, most worms were constricted and became vesiculated and moribund. However, many cysticerci reproduced asexually by exogenous budding in one gerbil at day 60 PI. On the other hand, in mice, most worms were encapsulated and had died by day 16 PI.

The tegument of parasite was observed by scanning electron microscopy and classified into two types of microtriches, i. e., "filamentous" and "blade-like" microtriches. The course of development of the parasite was discussed.