CIRCUMOVAL AND MICRO-PRECIPITATION REACTIONS ON LIVING SPECIMENS OF *ANGIOSTRONGYLUS CANTONENSIS*

Yuzaburo OKU

Department of Parasitology
Faculty of Veterinary Medicine
Hokkaido University, Sapporo 060, Japan

Positive circumoval and micro-precipitation reactions on living *A. cantonensis* at various developmental stages were recognized after incubation at 34°C for 24 hr using sera heated at 56°C for 30 min and unheated sera from *Angiostrongylus cantonensis*-infected or -transferred rats and hyper-immunized guinea pigs. The characteristic precipitates were mainly formed at the excretory pore and cuticle of the 3rd stage larvae; the oral opening, excretory pore and cuticle of the 4th stage larvae; and the vulva, anus, cloaca, oral opening, excretory pore and cuticle of immature adults. The precipitates, however, were not formed in the 1st stage larvae. The precipitates began to appear 1 to 4 weeks after infection. These reactions were recognized irrespective of sex and developmental stage of the worm. Positive cross-reactions were observed in sera from *A. costaricensis*-infected rats, but not in the sera from *Trichinella spiralis*-infected rats. Applying a technique of immunofluorescence, it was shown that immunoglobulins were specifically incorporated into the precipitates. The results of these reactions were compared with those of indirect hemagglutination and double diffusion tests. The efficiency of the microprecipitation test was noted for immunodiagnosis of angiostrongyliasis.

DISTRIBUTION OF ANTIBODIES AGAINST INFLUENZA VIRUSES A, B, AND C IN ANIMALS

Tokio ONTA

Department of Hygiene and Microbiology
Faculty of Veterinary Medicine
Hokkaieo University, Sapporo 060, Japan

The sera from selected animals found chiefly in Hokkaido were studied using the hemagglutination-inhibition (HI) tests for the presence of antibodies against influenza viruses A (15 subtypes), B, and C. The following animals were used: horses, cows, swine, cats, minks, and rats. All sera were treated with RDE