

# **Rodent model for long-term maintenance and development of the viable cysticerci of *Taenia saginata asiatica***

鍾文政

**Wang IC;Chung WC;Lu SC;Fan PC**

摘要

## **Abstract**

Although oncospheres of *Taenia saginata asiatica* can develop into cysticerci in immunodeficiency, immunosuppressed, and normal mice, no detailed information on the development features of these cysticerci from SCID mice is available. In the present study, the tumor-like cyst was found in the subcutaneous tissues of each of 10 SCID mice after 38-244 days inoculation with 39,000 oncospheres of *T. s. asiatica*. These cysts weighed 2.0-9.6 gm and were 1.5-4.3 cm in diameter. The number of cysticerci were collected from these cysts ranged from 125 to 1,794 and the cysticercus recovery rate from 0.3% to 4.6%. All cysticerci were viable with a diameter of 1-6 mm and 9 abnormal ones each with 2 evaginated protoscoleces were also found. The mean length and width of scolex, protoscolex, and bladder were  $477 \times 558$ ,  $756 \times 727$ , and  $1,586 \times 1,615 \mu\text{m}$ , respectively. The diameters of suckers and rostellum were  $220 \mu\text{m}$  and  $70 \mu\text{m}$ , respectively. All cysticerci had two rows of rostellar hooks. These findings suggest that the SCID mouse model can be employed as a tool for long-term maintenance of the biological materials for advanced studies of immunodiagnosis, vaccine development, and evaluation of cestocidal drugs which would be most benefit for the good health of the livestocks.