

# **Experimental studies on physiological and morphological aspects of *Cysticercus cellulosae* in pigs**

鍾文政

**Fan PC; Chung WC; Guo JX; Ma YX; Xu ZJ**

摘要

## **Abstract**

Three Small-Ear-Miniature, 3 Landrace-Small-Ear-Miniature, and one Douc-Yorkshire-Landrace pigs were inoculated orally with 100 000 eggs of Zhengzhou strain or 10 000 eggs of Harbin strain of *Taenia solium*. A total of 3739 cysticerci were recovered from 3 Small-Ear-Miniature and 3 Landrace-Small-Ear-Miniature pigs, giving an infection rate of 85.7% and a cysticercus recovery rate of 1.1%. The predilection sites of *Cysticercus cellulosae* in descending order were leg muscles, abdominal muscles, thoracic muscles, liver, head muscles, diaphragm, tongue, heart, trachea, and omentum/testes. Except 2 calcified cysticerci in the tongue, 2 in the heart, and 176 in the liver, the remaining cysticerci were all alive. The greatest number of cysticerci per 100 g of muscles or viscera was found in the head muscles, followed by the leg, diaphragm, heart, tongue, thoracic, abdominal, omentum, testes, and trachea. All cysticerci were evaginated in pig's bile after fluid was drawn out from cysticerci, whereas evagination occurred in only 83.2% of those without fluid drawing. In 364 evaginated cysticerci, the mean length and width of scolex, proglottid, and bladder, and diameter of rostellum and sucker were 826 x 747 microm, 5,370 x 1,734 microm, 2,885 x 3,002 microm, 155 microm, and 253 microm, respectively. In the protoscolex, the mean number of segments was 33. Each cysticercus had 2 rows of rostellar hooks on the scolex, and the mean length and width of inner and outer hooks were 151 x 18 microm and 117 x 14 microm, respectively. The number of paired hooks ranged from 10 to 18.