

**Experimental studies on small hooks
preceding large hooks in the growth and
development of *Taenia solium* metacestodes**

鍾文政

Fan PC; Chung WC; Guo JX; Ma XY; Xu ZJ

摘要

Abstract

In the present study, we have determined the growth and development pattern of rostellar hooklets of *Taenia solium* cysticerci (Zhengzhou and Harbin strains) in three pigs (1 SEM and 2 L-SEM strains) 89-196 days post experimental infection. A total of 3,675 cysticerci were collected from 3 pigs, 3,007 (82%) of 3,675 cysticerci were evaginated by enzyme method. 439 (15%) evaginated cysticerci were carefully examined and measured after dehydration, staining, and mounting on microscopic slides. Among 439 cysticerci, 234 (53%) had pair rostellar hooks, 88 (20%) with unpair hooks, 60 (14%) only small (outer row) hooks, and 57 (13%) no hooks including 34 hooks were completely dropped and 23 no hooks developed. The number ranged from 10 to 17 pairs for pair hooks and 1 to 29 for unpair ones. The length and width of rostellar hooks on the scolex of cysticerci were usually larger in the pig with longer infection time. Moreover, cysticerci with pair and unpair rostellar hooks had only small hooks and no hooks were present on their scolices. However, cysticerci with only large (inner row) hooks were not found. These findings indicate that the growth and development of small hooks precedes that of the large hooks in the formation of the two-row pattern rostellar hook in *Cysticercus cellulosae*.