## Cross-reactions of sera from Ascaris suum, Toxocara canis, and Angiostrongylus cantonensis infected mice with Ascaris suum antigens

范家?

Fan CK;Su KE;;;

摘要

## **Abstract**

Ascaris suum larval excretory-secretory (AsES) antigen and larval (AsLA) as well as adult somatic antigen (AsAA) which were thought to be possibly helpful in the diagnosis of visceral larva migrans (VLM) due to A. suum infection were investigated in the present study. Serum taken from mice orally inoculated with approximately 250 embryonated eggs of A. suum or Toxocara canis, or 40 third-stage larvae of Angiostrongylus cantonensis were assessed by enzyme-linked immunosorbent assay (ELISA) using the AsES antigen, AsLA or AsAA at 1, 2, 3, 4, 6 and 8 weeks post infection (WPI). The titer of serum IgG from mice infected with A. suum increased from I WPI and a peak at 4 WPI was observed when it reached approximately three times the level of uninfected control mice. Thereafter, it decreased gradually but remained high as found from 6 to 8 WPL No cross-reactions of heterologous serum IgG against AsES antigen was observed, whereas heterologous serum IgM exhibited significant cross-reactions to AsES antigen. Cross-reactivities to AsLA and AsAA by heterologous serum IgG as well as IgM antibodies were also observed in the trial. Altogether, the AsES antigen apparently seemed to be superior to the other two somatic antigens when used in the diagnosis of A. suum-induced VLM with serum IgG as tested by ELISA. Moreover, it was the first report to test the possibly antigenic, cross-reactivity between A. suum and A. cantonensis. (C) 2004 Elsevier Ireland Ltd. All rights reserved.