

Enhanced expressions of transforming growth factor- β 1 in inflammatory cells and secretory granules in Paneth cells in the small intestine of mice infected with *Toxocara canis*

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摘要

Abstract

The small intestine is the initial organ which *Toxocara canis* larvae invade. Information on intestinal pathological changes associated with transforming growth factor- β 1 (TGF- β 1) and secretory granules (SG) in Paneth cells (PCs) caused by *T. canis* is unclear. Mice orally inoculated with 250 *T. canis* infective eggs were evaluated by pathological and immunohistochemical assessments with a 294-day investigation. Pathologically, the inflammatory reactions with or without trapped larvae in the submucosa were observed only within the first 28 days post-infection (DPI), with inflammatory injury ranging from severe during 2 DPI to mild between 7 and 28 DPI. The crypts of Lieberkuhn were major larval penetration sites. Enhanced expression of SG in PCs appeared earlier than those of TGF- β 1 in infiltrating cells. The significance of both effectors might be related to the host's defense against larval invasion in the intestinal phase of toxocaral infection.