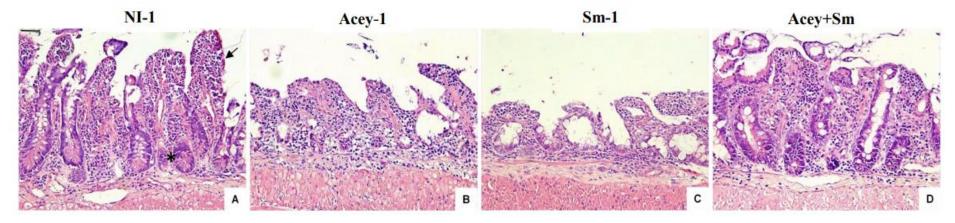
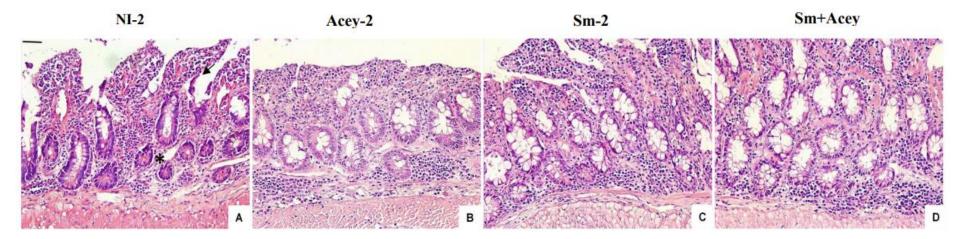
## Journal of Helminthology

Previous hookworm infection attenuates the immune response to a subsequent Schistosoma mansoni infection in an experimental model

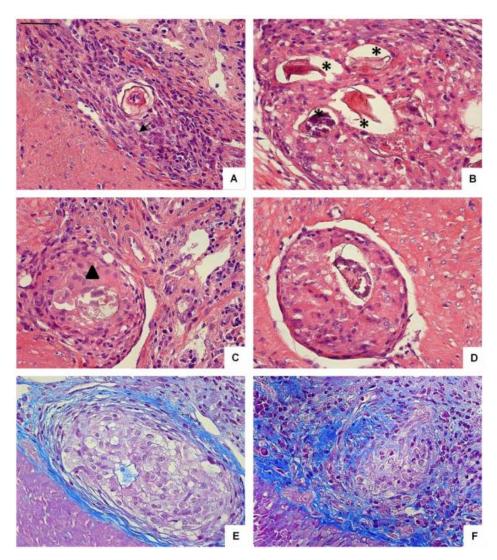
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Representative photomicrographs of histological sections of the small intestine of hamsters. Non-infected group (NI-1), infected with 50 L3 of *Ancylostoma ceylanicum* (Acey-1), infected with 30 cercariae of *Schistosoma mansoni* (Sm-1), and infected with 50 L3, after 20 dpi, coinfected with 30 cercariae of *S. mansoni* (Acey+Sm). A: Normal histological appearance showing intact villi (arrow) and Lieberkühn crypts (asterisk); B, C: Tissue architecture disruption showing areas with reduced villus height; D: Hypertrophy of Lieberkühn crypts. Hematoxylin-Eosin. Scale bar = 50µm.



Representative photomicrographs of histological sections of the small intestine of hamsters. Non-infected group (NI-2), infected with 50 L3 of *Ancylostoma ceylanicum* (Acey-2), infected with 30 cercariae of *Schistosoma mansoni* (Sm-2), infected with 30 cercariae of *S. mansoni* and after 65 dpi, coinfected with 50 L3 of *A. ceylanicum* (Acey+Sm). A: Normal histological appearance showing villi (arrow) and intact Lieberkühn crypts (asterisk); B, C, and D: Tissue architecture disruption showing areas with reduced villus height and hypertrophy of Lieberkühn crypts. Hematoxylin-Eosin. Scale bar = 50µm.



Representative photomicrographs of histological sections of the small intestine of hamsters infected with *Schistosoma mansoni* and *Ancylostoma ceylanicum*, showing epithelioid granulomas in different developmental stages: exudative phase granuloma around embryonated *S. mansoni* egg, with presence of epithelioid cells (arrow) (A); exudative phase granuloma around *S. mansoni* eggs at different stages (B); productive phase granulomas around necrotic eggs (asterisk) showing giant cells (arrow) (C and D); healing granulomas by fibrosis in an early process from the periphery to the center (E) or later stage (F). Hematoxylin-Eosin. Scale bar = 50µm.