

论著

环孢素A体外抗曼氏血吸虫合胞体超微结构的变化

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摘要

[目的]探讨环孢素A体外抗曼氏血吸虫超微病理改变。[方法]MF1小鼠实验感染曼氏血吸虫6wk后,经主动脉和门静脉灌注收集虫体。将虫体放入含有20 μg/ml环孢素A的M199培养液中体外培养。用扫描电镜和透射电镜观察药物所致的虫体损害。[结果]药物作用后,大多数雄虫皮层肿胀、表面出现大小不一的结节、皮层外膜破溃、皮棘脱落、合胞体极度破坏;个别雄虫皮层出现空泡;雌虫皮层极度空泡变及合胞体受损。[结论]环孢素A具有直接抗曼氏血吸虫的作用,合胞体受损是药物作用的主要机制。

关键词 [环孢素A](#) [曼氏血吸虫](#) [合胞体](#) [超微结构](#)

分类号

ULTRA-PATHOLOGICAL STUDY ON THE SYNCYTIUM OF SCHISTOSOMA MANSONI EXPOSED TO CYCLOSPORIN A IN VITRO

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Abstract

[Objective] To study the ultra pathological changes of syncytium of Schistosoma mansoni after cyclosporin A (CsA) treatment. [Methods] MF1 mice were infected with Schistosoma mansoni cercariae. Six weeks later, the adult worms were recovered by portal vein perfusion. After the worms were exposed to CsA of 20 μg/ml for 24 h, the drug induced damage of the worm surface was observed by SEM and TEM. [Results] Incubation of male and female schistosomes with 20 μg/ml of CsA for 24 h resulted in disruption of the tegument and rupture of the spines. Progressive surface damage and swelling and vacuolization of the tegument led to eventual disruption of the syncytium. [Conclusion] The antischistosomal action of CsA is direct, the syncytium is the main site for CsA attack.

Key words [cyclosporin A](#) [Schistosoma mansoni](#) [syncytium](#) [ultrastructure](#)

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