

论著

不同毒力虫株弓形虫对绿猴肾细胞侵袭及增殖的研究

杨惠珍, 张爱民, 杨杨, 钱宗立

上海第二医科大学寄生虫学教研室

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摘要

目的: 探讨弓形虫不同毒力株影响侵袭力的增殖因素。方法: 在体外培养条件下采用 RH、B 3 6 和 F u k a y a 虫株的弓形虫速殖子以绿猴肾细胞 (V e r o 细胞) 为攻击对象, 根据虫体有否纯化及培养液中是否含小牛血清, 系统地观察了各虫株的最早侵袭时间、侵袭率及胞内增殖变化。结果: R H、B 3 6、F u k a y a 3 株种弓形虫速殖子在较短时间内即

有侵入宿主细胞, 侵袭率随着时间的延长而增高, 3 株虫株在胞内增殖情况以 R H 株最为活跃、B 3 6 株次之, 而 F u k a y a 株相对较为迟缓。结论: 环境因素以虫体经纯化和培养液内含小牛血清对虫体的增殖的影响最显著。

关键词 [弓形虫](#) [Vero细胞](#) [侵袭](#) [增殖](#)

分类号

STUDY ON INVASIBILITY AND MULTIPLICATION OF TOXOPLASMA STRAINS WITH DIFFERENT VIRULENCE TOWARD VERO CELLS

Yang Huizhen, Zhang Aimin, Yang Yang, Qian Zongli

Department of Parasitology, Shanghai Second Medical University, Shanghai 200025

Abstract

AIM: To investigate the pathogenic mechanisms of Toxoplasma strains with different virulence. METHODS: Tachyzoites from 3 strains, Viz. RH, B 36 and Fukaya strains, were challenged to in vitro cultivated Vero cells. Systematic examinations on the earliest invasion time, the invasion rate and intracellular multiplication were performed under different cultivation conditions. RESULTS: The tachyzoites of all the 3 strains invaded the host cells within a short period after inoculation. Invasion rates were all increased along with the prolonged duration of infection. The intracellular multiplication was found to be most active in RH strain, moderate in B36, and comparatively slow in Fukaya strains. Using purified tachyzoites freed from host debris and proteins and adding sufficient FCS in the medium may facilitate the invasion and subsequent multiplication of the parasite. CONCLUSION: Strain differences in pathogenicity to the host may be correlated to the genetically predetermined multiplication capabilities of the parasites after being invaded to the host cell, and that environmental factors may give certain impact on the invasibility of the parasite.

Key words [Toxoplasma](#) [Vero cells](#) [pathogenicity](#) [invasion](#) [multiplication](#)

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通讯作者

作者个人主页 杨惠珍; 张爱民; 杨杨; 钱宗立

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