

论著

细粒棘球绦虫重组BCG-Eg95疫苗诱导小鼠脾细胞淋巴因子变化的研究

李文桂,王鸿,朱佑明

重庆医科大学附属第一医院传染病寄生虫病研究所, 重庆 400016

收稿日期 修回日期 网络版发布日期 接受日期

摘要

目的 探讨细粒棘球绦虫(Eg)重组BCG-Eg95疫苗免疫后对受攻击小鼠的包囊减重率及脾细胞淋巴因子的影响。方法 细粒棘球绦虫重组BCG-Eg95疫苗分别采用皮下注射、鼻腔内接种、口服灌胃和肌肉注射4种途径免疫BALB/C小鼠,免疫后8周用Eg原头节攻击感染,50个Eg原头节/每只小鼠,感染后18周剖杀小鼠,分离并称重细粒棘球绦虫,计算包囊减重率;取脾,分离脾细胞,用Eg粗抗原(EgAg)或伴刀豆球蛋白A(ConA)刺激培养,收集脾细胞培养上清液,检测脾细胞培养上清液的白介素-2(IL-2)、 γ 干扰素(IFN- γ)、肿瘤坏死因子 α (TNF- α)和白介素-4(IL-4)水平。同时设卡介苗(BCG)和磷酸盐缓冲液(PBS)对照。结果 以上4种疫苗接种组的包囊减重率分别为45.77%、18.20%、88.05%和92.46%;疫苗肌肉接种组的IL-2、IFN- γ 和TNF- α 均较PBS对照为高,分别为(30.0 \pm 0) pg/ml、(65.0 \pm 0) pg/ml和(425.0 \pm 10.7) pg/ml,IL-4低于PBS对照组,为(10.0 \pm 0) pg/ml。结论 细粒棘球绦虫重组BCG-Eg95疫苗诱导小鼠产生辅助性T细胞1型(Th1)反应,从而对抗Eg原头节攻击感染。

关键词 [细粒棘球绦虫](#) [重组BCG-Eg95疫苗](#) [细胞因子](#)

分类号

Change of Splenocyte Lymphokines in Mice Induced by Recombinant BCG-Eg95 Vaccine against *Echinococcus granulosus*

LI Wen-gui,WANG Hong,ZHU You-ming

Institute of Infectious and Parasitic Diseases, The First Affiliated Hospital, Chongqing Medical University, Chongqing 400016, China

Abstract

Objective To investigate the reduction of hydatid cyst weight and change of splenocyte lymphokines in mice immunized with recombinant BCG-Eg95 vaccine of *Echinococcus granulosus* (Eg). Methods BALB/C mice were subcutaneously, intranasally, orally and intramuscularly vaccinated respectively, with BCG and PBS served as controls. The mice were challenged with Eg protoscolices 8 weeks after vaccination and sacrificed in 18 weeks after infection. The weight of hydatid cyst was measured and reduction of the weight was obtained, spleens were used to separate splenocytes which were cultured under stimulation with EgAg or ConA. The supernatant was collected to measure the level of IL-2, IFN- γ , TNF- α and IL-4 by ELISA. Results The hydatid cyst weight reduced by 45.77%, 18.20%, 88.05% and 92.46% respectively in the 4 immunization groups. In comparison with PBS control, the level of IL-2, IFN- γ and TNF- α was (30.0 \pm 0) pg/ml, (65.0 \pm 0) pg/ml and (425.0 \pm 10.7) pg/ml respectively in the intramuscular group with a significant increase, but that of IL-4 decreased, with a value of (10.0 \pm 0) pg/ml. Conclusion The recombinant BCG-Eg95 vaccination induces Th1 response in mice against challenge infection.

Key words [Echinococcus granulosus](#) [Recombinant BCG-Eg95 vaccine](#) [Cytokines](#)

DOI:

通讯作者

作者个人主页

李文桂;王鸿;朱佑明

扩展功能

本文信息

▶ [Supporting info](#)

▶ [PDF\(242KB\)](#)

▶ [\[HTML全文\]\(0KB\)](#)

▶ [参考文献\[PDF\]](#)

▶ [参考文献](#)

服务与反馈

▶ [把本文推荐给朋友](#)

▶ [加入我的书架](#)

▶ [加入引用管理器](#)

▶ [复制索引](#)

▶ [Email Alert](#)

▶ [文章反馈](#)

▶ [浏览反馈信息](#)

相关信息

▶ [本刊中 包含“细粒棘球绦虫”的相关文章](#)

▶ 本文作者相关文章

· [李文桂](#)

· [王鸿](#)

· [朱佑明](#)