

论著

日本血吸虫未成熟虫卵26/28kDa抗原诱导抗雌虫生殖和抗卵胚发育免疫的研究

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摘要

目的: 探讨日本血吸虫未成熟虫卵的26/28 kDa 抗原(SIEA26/28 kDa) 诱导小鼠产生抗雌虫生殖免疫的效果。方法: 采用纯化的SIEA26/28 kDa 抗原以及SIEA-I 抗原, 分别免疫BALB/c小鼠, 于攻击感染后46d 进行粪卵、组织内虫卵定量。结果: 证明SIEA26/28 kDa 抗原能诱导小鼠产生抑制雌虫生殖的免疫力。与对照组比较, SIEA26/28 kDa 抗原免疫鼠减虫虽不明显, 但肝组织内总卵数、成熟卵数和粪卵数(EPG)分别减少48.1%、83.6%、87.3%, 死亡卵数明显增加($P < 0.001$)。此外, 未纯化的SIEA和纯化的SIEA26/28 kDa 抗原免疫组均见雌虫子宫内虫卵数下降, 分别达40.9%、54.8%, 而SEA 和SIEA-I 抗原免疫未见上述效应。结论: 提示抗雌虫生殖免疫和抗卵胚发育的效应, 主要与SIEA26/28 kDa 蛋白组分有关。

关键词 [日本血吸虫](#) [未成熟卵](#) [26/28 kDa 抗原](#) [免疫](#) [抗卵胚](#) [抗雌虫生殖](#)

分类号

STUDIES ON ANTI-FEMALE FECUNDITY AND ANTI-EMBRYONATION IMMUNITY INDUCED IN MICE WITH 26/28 kDa ANTIGENS OF IMMATURE EGGS OF *SCHISTOSOMA JAPONICUM*

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Abstract

AIM: To observe the effect of antiembryonation and anti-female fecundity immunity in mice induced by the 26/28 kDa antigens purified from soluble immature eggs antigen (SIEA) of *Schistosoma japonicum*. METHODS: BALB/c mice were immunized with SIEA 26/28 kDa or SIEA-I antigen to examine if these antigens can induce anti-disease immunity as determined by egg burden in liver, intestines and faeces on day 46 after challenge infection with cercariae of *S. japonicum*. RESULTS: A comparison of the egg burden in tissues and faeces on day 46 after challenge infection showed that the number of mature eggs in the livers, intestines and faeces was significantly reduced in mice immunized with SIEA 26/28kDa by 83.6%, 93.3% and 87.3%, respectively, whereas the number of dead eggs was much greater in the tissues of immunized mice than in that of control mice. In addition, the number of eggs in the uteri of female adults was obviously decreased in mice immunized with SIEA 26/28 kDa antigens or with the SIEA. However, these immune responses were not induced by the SEA or SIEA-I. CONCLUSION: The 26/28 kDa antigens were major components in SIEA responsible for both anti-fecundity and antiembryonation immunity.

Key words [Schistosoma japonicum](#) [immature egg](#) [26/28 kDa antigen](#) [immunization](#) [antiembryonation](#) [anti-fecundity](#)

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