

论著

## 应用聚合酶链反应在海南检测间日疟原虫的效果

何建文<sup>1</sup>, 蔡贤铮<sup>2</sup>, 张永生<sup>1</sup>, 王香凤<sup>2</sup>, 华德<sup>2</sup>, 王赛梅<sup>2</sup>

上海第二军医大学长海医院实验诊断科, 上海 200433; 海南省热带病防治研究所, 海口570203

收稿日期 修回日期 网络版发布日期 接受日期

摘要

目的: 建立适合疟疾流行区现场应用的PCR检测间日疟的方法, 并在现场与常规涂片镜检法进行比较。方法: 通过改良血样的采集及模板处理, 设计引物及优化反应条件等, 建立简便、敏感与特异的PCR检测间日疟原虫的方法, 并在海南省疟疾流行区对310例间日疟患者与镜检法进行比较。结果: PCR检测间日疟原虫具有特异性, 其敏感性为10个原虫/μl。PCR检测和镜检法的阳性率分别为34.2%和31.9%, 与PCR比较, 镜检法有5例误诊或漏诊。结论: 此PCR法可用于现场检测间日疟患者。

关键词 [间日疟原虫](#) [聚合酶链反应](#) [检测](#)

分类号

## DETECTION OF PLASMODIUM VIVAX BY POLYMERASE CHAIN REACTION IN HAINAN

HE Jianwen<sup>1</sup>, CAI Xianzheng<sup>2</sup>, ZHANG Yongsheng<sup>1</sup>, WANG Xiangfeng<sup>2</sup>, HUA De<sup>2</sup>, WANG Saimei<sup>2</sup>

1 Department of Clinical Laboratory of Changhai Hospital; Second Military Medical University; Shanghai 200433 2 Hainan Provincial Institute of Tropical Disease, Haikou 570203

Abstract

AIM: To establish a modified polymerase chain reaction(PCR) method for the detection of Plasmodium vivax in the endemic areas of malaria and compare the method with the conventional light microscopy in the field. METHODS: A PCR method was modified by improving the collection procedures of blood samples, template extraction, primer design and optimizing the reaction condition. The method was evaluated by examining blood samples from 310 patients with vivax malaria and compared with the conventional light microscopy in endemic areas of Hainan Province. RESULTS: The positive rates of the modified PCR method and microscopic method were 34.2% and 31.9%, respectively. CONCLUSION: The modified PCR method is simple, sensitive and specific for the detection of vivax malaria patients in endemic areas. \;

Key words [Plasmodium vivax](#) [PCR](#) [detection](#)

DOI:

通讯作者

作者个人主页 何建文<sup>1</sup>; 蔡贤铮<sup>2</sup>; 张永生<sup>1</sup>; 王香凤<sup>2</sup>; 华德<sup>2</sup>; 王赛梅<sup>2</sup>

扩展功能	
本文信息	
▶	<a href="#">Supporting info</a>
▶	<a href="#">PDF (256KB)</a>
▶	<a href="#">[HTML全文](0KB)</a>
▶	<a href="#">参考文献[PDF]</a>
▶	<a href="#">参考文献</a>
服务与反馈	
▶	<a href="#">把本文推荐给朋友</a>
▶	<a href="#">加入我的书架</a>
▶	<a href="#">加入引用管理器</a>
▶	<a href="#">复制索引</a>
▶	<a href="#">Email Alert</a>
▶	<a href="#">文章反馈</a>
▶	<a href="#">浏览反馈信息</a>
相关信息	
▶	<a href="#">本刊中 包含“间日疟原虫”的 相关文章</a>
▶	本文作者相关文章
·	<a href="#">何建文</a>
·	<a href="#">蔡贤铮</a>
·	<a href="#">张永生</a>
·	<a href="#">王香凤</a>
·	<a href="#">华德</a>
·	<a href="#">王赛梅</a>