

论文

急性呼吸系统疾病暴发疫情多重巢式PCR检测分析

张洁¹, 姚文清¹, 刘敏¹, 陈静乙², 田疆¹, 孙英伟¹, 赵卓¹

1. 辽宁省疾病预防控制中心感染与传染性疾病预防控制所, 辽宁沈阳110005;
2. 中国医科大学

摘要:

目的 对3起不明原因的聚集性急性呼吸系统疾病暴发疫情的标本进行多重巢式PCR检测,及时筛查SARS病毒、高致病性人禽流感H5N1亚型病毒并检测其他亚型流感病毒、副流感病毒、支原体、肺炎衣原体等病原体,探讨该方法在聚集性急性呼吸系统疾病调查中的应用意义。方法 采用多重巢式PCR方法对3起疫情的咽拭标本进行可引起急性呼吸系统疾病的23种病原体进行筛查。结果 医院甲不明原因肺炎聚集性病例9例,对9例咽拭标本进行筛查,肺炎衣原体感染6例;学校乙不明原因肺炎聚集性病例69例,对13份咽拭标本进行检测,B型流感嗜血杆菌(HIB)感染7例;学校丙不明原因肺炎聚集性病例12例,对12份咽拭标本进行检测,HIB感染5例。结论 多重巢式PCR方法可快速有效地筛查引起聚集性急性呼吸系统疾病暴发疫情的病原体,为有效遏制疫情及进一步处理提供线索。

关键词: 多重巢式PCR技术 肺炎衣原体 B型流感嗜血杆菌(HIB)

Application of multiplex RT-nested PCR in pathogen screening for outbreak of acute respiratory system diseases

ZHANG Jie¹, YAO Wen-qing¹, LIU Min¹

Department of Infection and Communicable Disease Control, Liaoning Provincial Center for Disease Control and Prevention, Shen-yang, Liaoning Province 110005, China

Abstract:

Objective To explore the application of multiplex reverse transcription(RT)nested PCR in the screening of pathogens related to epidemic outbreak of acute respiratory system diseases.Methods Totally 34 oropharyngeal swab specimens were collected from the cases of 3 epidemics of acute respiratory diseases and detected with multiplex RT-nested PCR for 23 pathogens related to the diseases.Results There were 9 cases of unknown pneumonosis happened in hospital A.*Chlamydia pneumoniae* was detected among 66.7% of the cases.There were 13 cases of unknown pneumonosis in school B and hemophilias influenzae B was detected in 7 cases(53.8%).There were 12 cases of unknown pneumonosis in school C and hemophilias influenzae B was detected in 5 cases(41.7%).Conclusion Multiplex RT-nested PCR is a rapid and highly efficient method to screen the pathogens related to epidemic outbreak of acute respiratory system disease.

Keywords: multiplex RT-Nested PCR *Chlamydia pneumoniae* hemophilias influenza B

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通讯作者: 赵卓,E-mail: zhaozhuo@Incdc.com

作者简介:

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