EVALUATION OF QUICKVUE INFLUENZA A+B TEST FOR RAPID SCREENING OF PANDEMIC INFLUENZA A/H1N1 -2009 VIRUSES FROM PATIENTS WITH FLU LIKE SYNDROME OF PHRAMONG-KUTKLAO HOSPITAL DURING 2009-2010

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Abstract

Background: A novel Influenza A/H1N1-2009 spread to most of the world's population causing significant morbidity, mortality including economic problems. Accurate and rapid diagnosis of Pandemic Influenza A/H1N1 virus infection is important for the prevention and control of influenza epidemics and the timely initiation of antiviral treatment.

Objectives: To evaluate QuickVue Influenza A+B test and compare with real-time reverse transcriptase polymerase chain reaction (rRT-PCR), gold standard, for its ability to detect Influenza A/H1N1 -2009 viruses.

Methods: Nasal swabs were collected from the patients with Flu like syndrome of Phramongkutklao Hospital between June 2009 to December 2010. Specimens were tested using QuickVue Influenza A+B test and RT-PCR.

Results: The study was conducted on 300 clinical nasal specimens. Of 300 specimens, 61 (20.3%) were positive for pandemic Influenza A/H1N1 -2009. Sensitivity and specificity of QuickVue Influenza A+B test kit for H1N1 2009 were 29.5% and 99.5%, respectively. Positive predictive value was 94.7% and negative predictive value was 82.2%.

Conclusions: This study demonstrates that QuickVue Influenza A+B test showed low sensitivity but high specificity during a period of high Influenza A/H1N1-2009. Thus, we should consider false negative results of QuickVue Influenza A+B rapid test for diagnosis and then treatment as well. However, rapid test kits can still be useful in preliminary screening during pandemic situation.

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