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A CLUSTER OF ZIKA VIRUS INFECTION AMONG TRAVELERS RETURNING TO CHINA FROM SAMOA: A CASE TRACING STUDY

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Background: A febrile man, who returned to China after a nine-day travel in Fiji and Samoa, was detected to be infected with Zika virus (ZIKV) at the port by Shenzhen Entry-Exit Inspection and Quarantine Bureau on Feb 14, 2016.

Methods: The patient and his 32 travelling companions were traced for ZIKV infection. A standardized questionnaire was used to obtain the information on demographics, clinical manifestations and exposure history. Their samples were tested for ZIKV by quantitative reverse transcriptase polymerase-chain-reaction (qRT-PCR). The positive samples were subjected to viral culture and genome sequencing.

Findings: Four of the 33 travelers were confirmed to be infected by ZIKV through qRT-PCR and viral culture, with an overall infection rate of 12%. Interestingly, one case (patient 3) had high viremia levels and was tested four days prior to symptoms. In addition,

a 7-year-old girl was identified to have ZIKV infection on Feb 17, but never had any manifestation. ZIKV was isolated from the four imported cases. Phylogenetic analysis based on whole genome sequences revealed that these isolates were similar to each other and close to the strain causing the French Polynesia outbreak in 2013.

Interpretation: The travelers should be informed of the high risk for ZIKV infection during their stay in areas with active transmission, and measures to prevent mosquito-bites.

Biography

Runzi Qi is a Medical Doctor (MD), Deputy Director of Health Quarantine, Former Zhejiang Entry-Exit Inspection and Quarantine Bureau until May 2018. Now Deputy Director of Health Quarantine, Hangzhou Customs District People's Republic of China.

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