July 8, 2014/ Vol.30 / No.13

Original Article

Epidemiology of Imported Chikungunya Fever Cases in Taiwan, 2008-2013

Hsueh-Mei Chiang¹, Hsin-Chun Lee¹, Wan-Ling Hsu¹, Mei-Jung Chen¹, I-Tse Lu², Jhy-Wen Wu¹, Kun-Bin Wu¹

- Northern Regional Center, Centers for Disease Control, Ministry of Health and Welfare, Taiwan
- 2. Division of Acute Infectious Diseases, Centers for Disease Control, Ministry of Health and Welfare, Taiwan

Abstract

Chikungunya fever, a mosquito-borne, febrile illness caused by Chikungunya virus, is prevalent in South East Asian countries. Both Aedes aegypti and Aedes albopictus, two common vectors for chikungunya fever, are widely distributed in Taiwan that pose a high risk for disease outbreak once the virus introduced into this country. We conducted a retrospective study to explore current epidemiology of this disease in Taiwan. Data of the reported cases of chikungunya fever during January 2008-September 2013 were retrieved from both databases, the National Notifiable Disease Surveillance System and the Investigation System, and analyzed. A total of 281 cases were reported during the study period, of which 229 (82%) were notified by health care workers and 62 (22 %) have been laboratory-confirmed. All of the 62 confirmed cases acquired the infection in other countries, including Indonesia, 36 (58%), followed by the Philippines, 9 (14.5%), and Malaysia, 7 (11.2%). The mean age of the confirmed case patients was 38 years. Fever (62.9%), joint pain (25.8%) and skin rash (24.2%) were common presentations. The interval between onset of disease and initial report was 8 days, longer than the viremic period. The result highlighted the need for strengthening clinician awareness and knowledge of chikungunya fever. In addition, enhancing the public self-protection awareness through education programs of travel medicine and implementing effective measures to achieve sustainable vector control are recommended to reduce the risk of epidemic of chikungunya fever in Taiwan.

Keyword: Chikungunya fever, chikungunya virus, vector, mosquito