

Outbreak Investigation of Acute Hepatitis C at an Outpatient Clinic, Taoyuan, Taiwan, 2017

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Abstract

The Taoyuan City Health Bureau was notified of three cases of acute hepatitis C (AHC) during January to March, 2017. The three AHC cases had received intravenous injections at a clinic in Yangmei District, Taoyuan City within incubation periods. To identify the extent of the suspected outbreak and implement prevention measures, the public health departments conducted a joint on-site investigation at the implicated clinic for four times and kept monitoring for AHC cases by National Notifiable Disease Surveillance System. As of May 12, five confirmed AHC cases and 10 cases of clinic-associated hepatitis C infection were identified. Most of the viral strains were phylogenetically correlated and belonged to genotype 1b. The lapses of infection control practices at the clinic included poor hand hygiene, possible repeated use of single-use vials, and preparation of injection drugs at the contaminated area were suspected to be the causes of this outbreak. This was the first, possibly iatrogenic, outbreak of AHC after screening blood donors for antibody to hepatitis C virus since 1992. In addition,

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molecular epidemiology was helpful and timely to clarify the relatedness among viral strains from cases in this investigation. To prevent the iatrogenic hepatitis C infection, healthcare personnel should comply with infection control measures and safe injection practices.

Keywords: Acute hepatitis C, standard precautions, safe injection practice, phylogenetic analysis