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Original Article

Epidemiological Analysis of Astrovirus-Associated Diarrhea Outbreaks in Taiwan, 2012

Hsieh-Cheng Chen, Ching-Yi Wu, Chih-Tung Lu, Fang-Tzy Wu, Ho-Sheng Wu

Center for Research, Diagnostics and Vaccine Development, Centers for Disease Control, Ministry of Health and Welfare, Taiwan

Abstract

Recently, viral agents have caused around 50% of reported diarrhea outbreaks in Taiwan. The reported cases were routinely screened for bacteria, norovirus and rotavirus. Noroviruses (NoVs) have been recognized as the major causal agent of outbreaks. In addition, the unknown etiological cases were further tested for sapovirus, adenovirus and astrovirus with the support of research project. There were a total of 303 reported diarrhea-associated outbreaks, in which 70 outbreaks were with unknown etiology by routine screening in 2012. In this study, we found 18 (25.7%) astrovirus-associated gastroenteritis outbreaks which affected people of 0-70 years old. Endemic peak was spring season and the incidence of astrovirus was only at first half of 2012. According to epidemiological information, the most common transmission route of astrovirus was food-borne transmission. To our knowledge, this study was the first epidemiological investigation of astrovirus-associated gastroenteritis outbreaks by detecting unknown gastroenteritis outbreaks in Taiwan.

Key word: Astrovirus, gastroenteritis outbreak, food-borne illness