

Epidemiology of Invasive Group A Streptococcal Infections and Associated Toxic Shock Syndrome in Taiwan, 2011–2015

Ying-Yan Chen, Shu-Man Yao, Chuen-Sheue Chiang*

Abstract

Invasive Group A *Streptococcus* infections and associated toxic shock syndrome are important infectious diseases worldwide, in the view of mortality, severe sequelae or medical burden. In 2011, the number of scarlet fever cases due to Group A streptococcal infections tripled in Hong Kong, including several children having invasive infection and toxic shock syndrome. Therefore, the Taiwan Centers for Disease Control set up a surveillance system to monitor the situation of invasive Group A *Streptococcus* infections and associated toxic shock syndrome in Taiwan in July, 2011. The surveillance ended in June, 2015.

In this research we analyzed the surveillance data from July, 2011 to June, 2015. A total of 876 cases were reported. The average annual incidence was 0.9 per 100,000 populations, with the highest incidence of 1.2 per 100,000 populations from July 2011 to June 2012. The number of cases and incidences increased with age. The elderly over 75 years old had the highest incidence of 4.5 to 6.5 per 100,000 populations. Male cases were more than female ones, with a ratio of 1.4 to 4.2. The case fatality rate was 3.1%.

The research revealed the current situation of the disease in Taiwan, and provided a valuable baseline data for future studies and policy formulation.

Keywords: invasive Group A Streptococcal infections, toxic shock syndrome, Scarlet fever

Center for Diagnostics and Vaccine Development,
Centers for Disease Control, Ministry of
Health and Welfare, Taiwan
DOI: 10.6525/TEB.202102_37(3).0001

Corresponding author: Chuen-Sheue Chiang*
E-mail: cschiang10@cdc.gov.tw
Received: Feb. 22, 2017
Accepted: Nov. 17, 2020