

Serotype Distribution and Demographics of Dengue Patients in a Tertiary Hospital of Lahore, Pakistan During the 2011 Epidemic

Authors : Muhammad Munir, Riffat Mehboob, Samina Naeem, Muhammad Salman, Shehryar Ahmed, Irshad Hussain Qureshi, Tahira Murtaza Cheema, Ashraf Sultan, Akmal Laeeq, Nakhshab Choudhry, Asad Aslam Khan, Fridoon Jawad Ahmad

Abstract : A dengue outbreak in Lahore, Pakistan during 2011 was unprecedented in terms of severity and magnitude. This research aims to determine the serotype distribution of dengue virus during this outbreak and classify the patients demographically. 5ml of venous blood was drawn aseptically from 166 patients with dengue-like signs to test for the virus between the months of August to November 2011. The samples were sent to the CDC, Atlanta, Georgia for the purpose of molecular assays to determine their serotype. RT-PCR protocol was performed targeting at the 4 dengue serotypes. Out of 166 cases, dengue infection was detected with RT-PCR in 95 cases, all infected with same serotype DEN-2. 75% of positive cases were males while 25% were females. Most positive patients were in the age range of 16-30 years. 33% positive cases had accompanying bleeding. This is first study during the 2011 dengue epidemic in Lahore that reports DEN-2 as the only prevalent serotype. It also indicates that more infected patients were males, adults, within age range of 16-30 years, peaked in the month of November, Dengue hemorrhagic fever (DHF) is manifested more in females, Ravi town was heavily hit by dengue virus infection.

Keywords : dengue, serotypes, Pakistan, DEN 2, Lahore, demography, serotype distribution, 2011 epidemic

Conference Title : ICVID 2014 : International Conference on Virology and Infectious Diseases

Conference Location : Bangkok, Thailand

Conference Dates : December 24-25, 2014