

Japanese Encephalitis- and Dengue-Associated Acute Encephalitis Syndrome Cases in Myanmar.

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This study was conducted to find the burden of dengue virus (DENV) and Japanese encephalitis virus (JEV) among children under the age of 13, who presented with acute encephalitis syndrome at Mandalay Children Hospital in Myanmar in 2013. Molecular and serological investigations were performed on 123 cerebrospinal fluid (CSF) samples collected from these patients. By neutralization tests and/or virus isolation, four (3.3%) JEV- and one DENV-associated encephalitis cases (0.8%) were confirmed. Antibody titer against JEV Genotype 3 was the highest among the laboratory-confirmed JEV cases. One strain of DENV-1 with Genotype 1 was isolated from the CSF sample of the dengue encephalitis patient; this was similar to the virus circulating in the study area and neighboring countries. This study shows that flaviviruses are important pathogens causing encephalitis in Myanmar. Active disease surveillance, vector control, and vaccination programs should be enforced to reduce the morbidity and mortality caused by flavivirus encephalitis.