

**Serological investigation of Chikungunya infection in Mandalay and
Pyin Oo Lwin**

**Saw Myat Thwe¹, Kay Thwe Thwe Maung¹, Suu Wah¹, Thein Thein Htwe¹,
Kyaw Thu Soe², Sein Han³, Tin Myint⁴, Kyaw Zin Thant⁵, Yi Yi Myint¹**

¹**Department of Medical Research (Upper Myanmar)**

²**Assistant Lecturer, University of Medicine, Magway**

³**Former Medical Superintendent, (550) Bedded Children Hospital, Mandalay**

⁴**Former Prof /Head (550) Bedded Children Hospital, Mandalay**

⁵**Director General, Department of Medical Research (Lower Myanmar)**

Abstract

Chikungunya is a viral disease, transmitted from human to human by the bite of infected female *Aedes aegypti* and *Aedes albopictus* mosquitoes. Human are major source, or reservoir of chikungunya virus for mosquitoes. Mosquito is the only vector to transmit the disease by biting an infected person to another. This study was carried out in Paediatric Unit of (300) Bedded Hospital, Pyin Oo Lwin and Children Hospitals (Mandalay) from 1st September 2012 to 31st October 2013. It was a community-based cross sectional descriptive study. Venous blood sample (3 ml) was taken after getting written informed consent from guardians. All samples were collected by using the disposable materials. Chikungunya IgM was investigated by using SD BIOLINE Chikungunya IgM test device (sensitivity and specificity are 97.1% and 98.9%) after separating the serum at Virology Research Division, Department of Medical Research (Upper Myanmar). A total of 300 children, 92 (30.7%) subjects were <5 years, 208(69.3%) subjects were 5-12 years. Forty-one (13.7%) cases out of (300) were laboratory-proven Chikungunya virus infection. All cases were presented with fever, 80.5% with skin rash, 2.4% and 4.9% with joint pain and muscle pain, respectively. Signs and symptoms of Chikungunya mimic those of dengue and it might be misdiagnosed in areas where dengue is common. These results would be useful for awareness of chikungunya infection especially in areas where dengue is prevalent.