"STOP Dengue Addressing the Key Challenges in Clinical Management of Dengue"

Assoc Prof Leo Yee Sin
Department of Infectious Diseases
Tan Tock Seng Hospital, Singapore

Abstract
The World Health Organisation (WHO) in a few years back estimated that 1.7 billion people or more than 70% of the residents in Asia and Pacific regions were at risk of dengue infection. The average case fatality rate of 0.4-0.6% was reported. In 2009, a total of 4187 dengue cases were notified to the local Ministry of Health. Majority of them were adults. In 2009, the WHO published its 3rd edition of dengue management guidelines. The major changes in the latest guidelines include more sensitive diagnostic criteria for probable dengue, proposal of using warning signs to triage care and a complete change in disease severity classification. Early dengue diagnosis remains a key challenge to most part of the world. Early dengue infection and outcome (EDEN) identified high body temperature, thrombocytopenia, leucopenia and lymphopenia as factors differentiating dengue from other febrile illness within 72 hours of illness onset. This requires further validation. About 40% of the adult patients at Tan Tock Seng Hospital had at least one warning signs during the course of dengue infection. In a recent local study, majority of the fatal cases had experienced one or more warning signs. Further research is needed to assess the validity of warning signs in guiding hospital admission and triage care. Without specific antiviral agent, treatment of dengue infection is largely supportive in nature. The type of fluids and volume are subject to further analyses.

Selected Publications


Lye C David , Lee J Vernon , Sun Yan and Leo YS. Lack of Efficacy of Prophylactic Platelet Transfusion for Severe Thrombocytopenia in Adults with Acute Uncomplicated Dengue Infection. CID 2009:48 (1 May)

Lee VJ , Lye DC, Sun Y and Leo YS. Decision tree algorithm in deciding hospitalization for adult patients with dengue haemorrhagic fever in Singapore. Tropical Med and International Health Vol 14 No. 9 Pg 1154-1159 Sept 2009