Epidemic of scrub typhus infection in Northern Sri Lanka: Susceptibility of Doxycycline monotherapy

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Scrub typhus is a zoonotic disease caused by a subtype of Rickettsiae; Orientia tsutsugamushi. It has significant prevalence in Eastern and Southeast Asia, usually presenting as an acute febrile illness. The diagnosis is often missed due to similarities with other tropical febrile infections, such as dengue and leptospirosis. The presence of typical eschar of scrub typhus infection aids the clear diagnosis. However, its painless and covert nature makes it difficult to diagnose clinically, when present with devastating complications like pneumonitis, meningoencephalitis and shock. Prompt therapy with highly sensitive antibiotics such as chloramphenicol, tetracycline, doxycycline and azithromycin in pregnancy and lactation shortens the course of the disease, lowers the risk of complications and in turn reduces morbidity and mortality due to rickettsial diseases. We conducted a retrospective study in 64 adult patients at Teaching Hospital, Jaffna during an epidemic in Northern Sri Lanka during March 2012-2013. They presented with acute fever (<14 days) and a clinical profile of typhus, without an obvious focus of infection. They were treated with a 7 day course of doxycycline monotherapy or azithromycin as per indication. All patients responded to monotherapy. Fever defervescence was noted on day 2 or 3 in majority of patients and complete recovery observed on day 7. Subsequently, 54 cases (84.4%) were found to be positive for scrub typhus with specific IgM and IgG ELISA (ImBios, USA). Typical eschar was identified in 49 cases among positives.

Biography
Jebananthy Anandaselvam Pradeepan was graduated from University of Jaffna as MBBS in 2004 and successfully completed MD in Internal Medicine in 2009 from University of Colombo, Sri Lanka. She proceeded for overseas training at Queensland Health, Australia. She assumed her duties as a Consultant Physician and Lecturer at the University Medical unit, Teaching Hospital, Jaffna in September 2014. Her current interests are tropical infectious diseases, in particular Rickettsial outbreaks in Sri Lanka. She has published papers related to typhus in peer reviewed journals.

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