

REPORTING ON THE SITUATION OF RICKETTSIAL INFECTION IN LABORATORY SERVICE WORK

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PROGRESS REPORT

Rickettsioses are one of the emerging infectious groups. The main diagnostic tool for rickettsial disease is based on serology and the most effective method is Indirect Immunofluorescent Assay (IFA). Moreover, for twenty years the Pathology Section, Research Division, AFRIMS and the Royal Thai Army have used this technique to detect the antibody in service work. Most of the specimens are sent from both government and civilian hospitals and other sources making up about 1,000 cases each year. Our rickettsial laboratory detected IgM and IgG for scrub typhus, murine typhus and tick typhus by IFA. Criteria for serologic laboratory confirmation shows a \geq fourfold rise in the antibody titers for the second serum when the first serum reported a positive result. In the fiscal year (2004), 1,408 sera were determined, the result showed 39 (2.8%) and 30 (2.1%) of antibody to scrub typhus and antibody to murine typhus respectively. Data for the case report of tick typhus was not found. Data obtained from cases reporting showed that positive antibody cases were found in 16 provinces. The majority were found in Bangkok (15 cases) while only 5 provinces (Kon Kaen, Nakhon Ratchasima, Nonthaburi, Samut Prakan and Sing buri) found few cases. One case was found in 10 provinces Krabi, Kanchanaburi, Chomporn, Nakhon Nayok, Nakhon Pathom, Nakhon Si Thammarat, Prachuap Khiri Khan, Maha Sarakham, Uthai Thani and Ubon Ratchathani. Most cases of scrub typhus occur in the end of the rainy season or early in the cold season. January is typically the month with the highest number of reported cases. Also, sporadic cases of murine typhus infections were found throughout the year. Our data from this laboratory work will be useful not only for appropriate treatment but also for evaluating the situation of rickettsial diseases at the present time.