THE ESTIMATED PREVALENCE OF RICKETTSIAL INFECTIONS IN RICKETTSIAL LABORATORY AT ARMED FORCES RESEARCH INSTITUTE OF MEDICAL SCIENCES IN 2013

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Progress Report

Rickettsial infections are still problem's in public health concern. It has predominantly recognized in febrile illness in travelers and in those residing in the tropics. It is caused by a variety of obligate intracellular, gram negative bacteria belonging to the Alphaproteobacteria. The most commonly diagnosed rickettsial diseases in travelers are usually in the spotted fever groups or typhus groups. Importantly, *Orientia* spp. makes up the scrub typhus group. The most pathogens are transmitted by the ectoparasites such as fleas, lice, mites and ticks via through skin bites and inhaling dust or inoculating conjunctiva. Most of several cases of scrub typhus occur during visits to rural areas in endemic country whereas murine typhus has been reported among travelers returning from Asia. Rickettsial laboratory at AFRIMS has been provided Rickettsia test service to patients from many hospitals for years. This progress is to report the number of patients from various health facilities regarding to Rickettsia infection in fiscal year 2013. We received the patients' samples from the other hospitals that were located in Bangkok and surroundings. This laboratory carries on for diagnosing rickettsial infections via immunofluorescence antibody assay (IFA) that is the gold standard methods. Additionally, the positive titer is mean $\geq$ 1:400. We have reported in the tendency of higher work for patient's samples 4,455 test with were around 8.8% (393/4,455) positive among this 6.4% (286/4455) were scrub typhus, 2.4% (107/4,455) were murine typhus; with one patient was tick typhus infection. In addition, two patients were the co-infections with scrub and murine typhus. With increasing access to travel, clinical concern of importantly rickettsial diseases and experienced physicians are difficult to specifically diagnose. Therefore, we intend to continuously rickettsial laboratory at AFRIMS which provides for the others hospitals and surroundings correspondence to early diagnosis and prompt treatment for saving patient's life.