Survey of Sylvatic Rodents for Serological Evidence of Leptospirosis Infection

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OBJECTIVE : To determine the incidence of infection of Leptospirosis among sylvatic rodents in the area around Pakchong, Thailand.

BACKGROUND : Leptospirosis is known to infect many species of animals and man. One major source of infection of leptospirosis in human is know to be wild rodents.

The investigators joined the Scrub Typhus rodent trapping team from the Department of Medical Entomology and used the specimens trapped by this team in conducting this survey. Rodents were trapped in the vicinity of Special Forces Camp Number 9, Pakchong, Nakornratchasima. Once the Scrub Typhus Team had extracted their samples from the rodents, the rodents were turned over to the investigators for examination for serological evidence of leptospirosis infection.

METHODS : Blood for serologic analysis was obtained from each trapped rodent by either ocular bleeding or heart bleeding. Approximately 0.5 ml. of whole blood was placed on a strip of Whatman No. 4 filter paper and allowed to dry for one hour at room temperature. The agglutination (lysis) test for the presence of leptospirosis antibodies was performed on each of the blood specimens at the laboratory of the Faculty of Tropical Medicine, Mahidol University, Bangkok, Thailand. This method has been previously described (1).

RESULTS : Results of the serological test for the presence of leptospiral antibodies in the 146 rodents trapped during this survey were negative. It should be noted that the agglutination (lysis) test was performed at a dilution of 1:100 only. This survey concludes the study of the incidence of Leptospirosis in sylvatic rodents in the Pakchong area.

REFERENCE :

1. Sundharagiati, B. and Harinasuta, C. : Determination of Leptospiral antibodies in Dry Blood on Filter Paper. Transactions of the Royal Society of Tropical Medicine and Hygiene, Vol. 59, No. 5, pp. 607-608, 1965.

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