# STUDY ON THE RECENT OUTBREAK OF TYPHUS IN JAFFNA DISTRICT

M G Sathiadas<sup>1</sup>, S Mayoorathy<sup>1</sup>, K Varuni<sup>1</sup>, K Murugananthan<sup>2</sup>

<sup>1</sup>Department of Paediatrics, <sup>2</sup>Department of Microbiology, Faculty of Medicine, University of Jaffna, Sri Lanka

## INTRODUCTION

A recent rise in the number of cases of scrub typhus has been noted in the Jaffna peninsula during the last few years. According to the epidemiology unit about 307 cases were notified from Jaffna last year which is the highest incidence among the districts of Sri Lanka.

There is no appropriate study on the peculiarities of the recent outbreak and factors influencing the recent outbreak. Thus, clinical profiling of the disease and identifying the factors are important to plan control measures.

#### **OBJECTIVES**

The objectives of this study are to study the peculiarities of the recent outbreak of typhus among the paediatric population in Jaffna and to assess the socio-cultural and environmental factors influencing the recent outbreak.

## DESIGN, SETTING AND METHOD

A prospective study was done among the 203 children treated for scrub typhus at the Teaching Hospital Jaffna using a pre-tested questionnaire during the period January 2012 to March 2013. Data regarding the demography, social background and the clinical features were considered. Twenty children (10%) were randomly selected and serological analysis was done by ELISA for scrub typhus antibodies.

### RESULTS

Majority (72.6%) belonged to the age group 5-12 years and the male: female ratio was 1:1.5. Average duration of fever at presentation was 6 days and all of them had fever. Dry cough (78%), vomiting (55%) and headache (44%) were the main presenting features. None of the cases had body aches and pains. On examination 108 (53%) had the classical eschar. Lymphadenopathy was found in 152 (75%) and hepatomegaly in 88%. None of the cases had the spotted fever rash. One hundred and fifty eight (78%) children were exposed to household pets and the main pet was the dog. Head lice were seen in 65% and closeness to the jungle/bushes was seen in 55%. Majority (183) of the children slept on the floor. Leukocytosis was seen in 56 (28%). Eighteen children who tested positive for IgM antibody had the eschar. One hundred and sixty one (79%) children responded to azithromycin and the mean response was seen in 2.3 days.

### **CONCLUSIONS**

- Typhus was experienced in the Jaffna district as an epidemic and classical clinical features were seen in majority
  of the patients.
- Identifying the eschar to diagnose the condition was reliable.
- Response rate was good to azithromycin.