



Scrub Typhus: A cause for Pyrexia of Unknown Origin Scenario in Chennai city, South India

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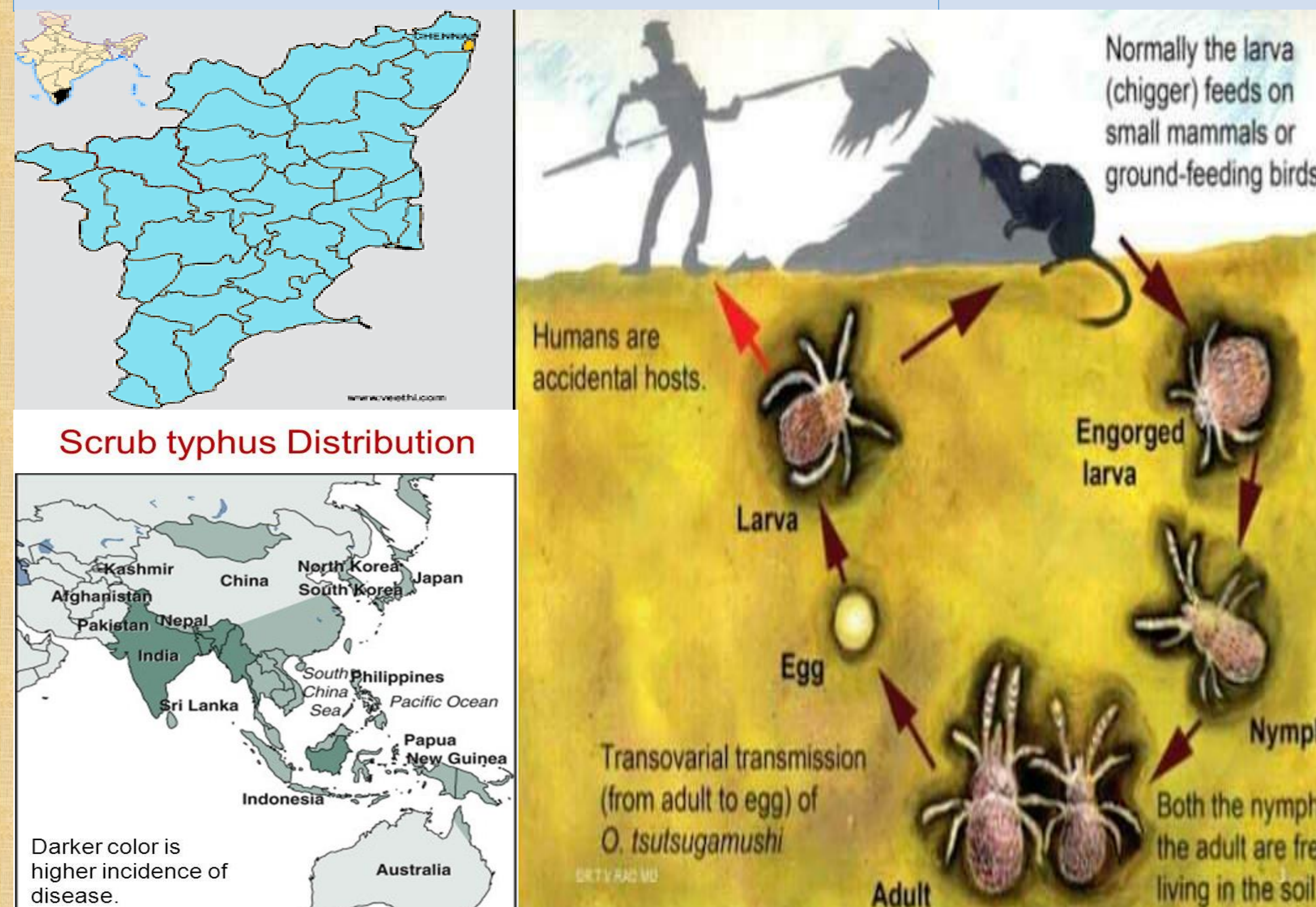
Background

Scrub typhus is re-emerging vector borne zoonotic disease in India. It is grossly under diagnosed and its awareness among clinicians is limited. Few reports has been published on the prevalence of scrub typhus in Chennai. The objective of this study was to identify scrub typhus infections in patients with Pyrexia of Unknown Origin (PUO) cases in Chennai, South India.

Methods

This was a prospective study. Patients with fever who presented to the Department of Experimental Medicine at T.N. Dr. M.G.R. Medical University between November 2015 to February 2016 were enrolled. Demographics and clinical symptoms and signs were recorded using a semi structured questionnaire. Under aseptic precautions, 2 ml of blood was collected by venipuncture and serum was separated and stored at 4°C for further testing. The scrub typhus Detect ELISA test was performed to detect IgM antibodies against *Orientia tsutsugamushi*. Data was analysed using mean and percentages.

Clinical features	% of patients
Fever	100
Headache	61
Nausea	61
Vomiting	48
Cough	61
Breathlessness	39
Myalgia and generalized weakness	65
Abdominal pain	48
Diarrhoea	34.5
Jaundice	8.5
Altered sensorium	13
Macular popular rashes	8.6
Eschar	13



Results

A total of 100 patients were enrolled and their age ranged from 4 to 80 years with a mean of 30 years (SD 21). Fifty six percent were males and 44% were females. Twenty three percent (23/100) were positive for IgM antibodies against *O. Tsutsugamushi*. Most (65%) of the positive patients were females. Majority of the patients (48%) positive for scrub typhus were in the younger age group (4-20 years) followed by patients in the age group 20-30 and 40-50 years with 17% in each group. The pathognomonic feature such as eschar was seen only in 3 patients. Five patients were positive for *Salmonella* Typhi.

Conclusion

In the present study 23% of patients were positive for scrub typhus infection. Hence scrub typhus infection should be considered as differential diagnosis in PUO cases in Chennai city.

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