

Pediatric Scrub Typhus: A Commentary

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ABSTRACT

The commentary is to highlight not the profile of scrub typhus but the correlation of serology with immunofluorescence.

Keywords: Epidemiology, Immunofluorescence, Scrub typhus.

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Scrub typhus has been reported from all over the world, but is endemic in the “Tsutsugamushi Triangle,” a geographical region of South and East Asia and the Southwest Pacific. In India, the first case reports appeared from Himachal Pradesh in the 1970s and 1980s but the major literature seemed to come from the southern states.¹

The practice of using tetracyclines and chloramphenicol in outpatient and general practice clinics, coupled with the widespread use of pesticides like DDT, may have masked the presentation of the disease to tertiary care centers and there appeared to be a “decline” in the incidence.² A resurgence was seen after about two decades in the winter months, which are post monsoon in the north as well as the southern regions of India.

Mortality, which varies considerably from known data but is about 8–10% under 30 years of age, as also seen in a review³ of 2,261 cases, was similar in this study. Hence, there were no other marked new or distinguishing aspects in this study in terms of clinical features or treatment.

However, this study⁴ did show good correlation of the IgM ELISA with the microimmunofluorescence as well as with the PCR. Diagnostic challenges remain as PCR-based techniques are not available outside of major centers, especially in areas where they are probably needed the most and hence the recommendation to treat on a “syndromic” basis in endemic areas based on undifferentiated fever, thrombocytopenia, or rash. This leads to overdiagnosis and overtreatment leading to the cycle of antibiotic resistance in the community. Microimmunofluorescence, the gold standard so far, is also unavailable but ELISA-based serology is easily available and accessible.

The reliability of the ELISA IgM validated here by the authors helps in reinforcing this as a good test in helping the clinician

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to narrow the treatment. As otherwise, these patients get empirically and unnecessarily treated for malaria, typhoid fever, and encephalitis often with artemether, multiple antibiotics, and acyclovir for prolonged periods.

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