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SCIENTIFIC LETTER

Burden of Pediatric Scrub Typhus at a Tertiary Care Hospital: Clinical, Biochemical, Complications and Predictors of Mortality and Morbidity

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To the Editor: Scrub typhus is the most common rickettsial infection in India. There have been many outbreaks of pediatric scrub typhus reported from several endemic regions in India in the last decade [1]. The present study was planned to study clinical, biochemical, complications and predictors of morbidity and mortality of pediatric scrub typhus.

All cases of acute febrile illness (>5 d) with compatible signs and symptoms for tropical infections were screened for Scrub typhus by IgM ELISA or Weil Felix test [2]. All confirmed cases of scrub typhus were enrolled for collecting data in predesigned performa.

Two hundred fifty-six cases were screened for tropical infections over a period of 21 mo from September 2019 through May 2021. There were 83 cases (50 boys) of Scrub typhus. Most common age group affected was between 5-10 y. Median age of presentation of this cohort was 84 mo (IQR-48,132). The most common symptoms were fever (100%), hepatomegaly (69.9%), vomiting (55.4%), facial puffiness (54.2%), rashes (51.8%) and lymphadenopathy (21.7%). Eschar, though a pathognomic feature of scrub typhus was not found in any children in our study. Absence of eschar was also found in studies done in north-eastern part of Uttar Pradesh [3, 4]. The most common complication was hepatitis (51.5%), followed by acute encephalitis syndrome (37.9%), pneumonia (34.8%) and platelet count <50,000/µL (34.8%). Majority (73.5%) were from rural areas while 26.5% were from urban areas. Acute encephalitis syndrome (AES) was present in 25 cases (39.68%) among all cases of AES. There were no independent predictors of acute respiratory distress syndrome (ARDS), myocarditis, hepatitis, invasive ventilation and death in scrub typhus patients on multivariate analysis. Platelet count <50,000/µL was an independent predictor of PICU admission, shock and acute kidney injury (AKI). Mortality was 12.04%. This study can guide the policy makers to streamline the health budget for reducing morbidity and mortality, attributed to scrub typhus.

Declarations

Conflict of Interest None.

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