Clinical profile of children suspected with typhus fever admitted to a single tertiary care unit

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Introduction Diagnosis of typhus fever is mainly based on clinical features as the specific investigations for scrub typhus is not available in the Northern part.

Objectives To study the seasonal variation, clinical features, outcome and environmental factors associated with the scrub typhus.

Design A retrospective study based on a database was done in children with clinical suspicion of typhus from February 2019 to July 2021. Data regarding the clinical features, sociodemographic factors, environmental factors and investigation findings were extracted. Serological diagnosis was performed by standard Q Tsutsugamushi IgM/IgG test. SPSS version 21 was used for analysis. Pearson's Chi-squared test was used and p-value < 0.05 was considered statistically significant.

Results A total of 70 patients were considered with the mean age of 6.72 ± 3.70 years and 73.4% (n=47) were from rural areas. Mean duration of hospitalization was 5.68 ± 3.1 days. Increased number of cases were seen during the rainy season.

All had fever, 38.6% (n=27) with gastrointestinal and 32.9% (n=23) with respiratory symptoms. Eschar, lymphadenopathy and hepatosplenomegaly were noted in 7.1% (n=5), 24.3% (n=17) and 22.9% (n=16) respectively. Transaminitis was seen in 72.6% (n=45) and raised inflammatory markers in 83.1% (n=54). Serological confirmation for Tsutsugamushi was seen in 40 patients (58.8%). Among the serologically confirmed cases, 77.4% (n=24) had exposure to animals

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with 51.6% (n=16) to rats, Eschar in 12.5% (n=5), hepatosplenomegaly in 35% (n=14) and lymphadenopathy in 35% (n=14). Four patients had meningitis and one developed sepsis.

Serological positivity was statistically significant with the presence of eschar (p=0.04) hepatosplenomegaly (p=0.008), lymphadenopathy (p=0.02), altered liver enzymes (p=0.003) and raised inflammatory markers (p=0.007).

Conclusion Typhus fever diagnosed clinically had minimum complications in children and serological confirmation was associated with the clinical features.