Pictorial CME

Eschar - An important Clinical Clue in Febrile illness in Rural Setting

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Figure 1: Showing central blacked crust, an eschar and surrounding erythema

CASE PRESENTATION

A 46 year old man presented with acute febrile illness of 7 days duration, he had been taking treat-ment on lines of enteric fever with multiple antibiotics, on examination was found to have a papular lesion on the back of the hand (axillary region), with central blacked crust, an eschar, and surrounding erythema, on further questioning he revealed that as the lesion didn't cause any pain or itching, and moreover being on posterior part of the body, he couldn't discover it, and didn't attribute the fever as a consequence to that lesion.

His other routine investigations were nonspecific, Complete urine examination showed: with mild protenuria, hematuria, a raised CRP was seen, hemoglobin, total counts and platelets were within normal limits, A rapid diagnostic IgM for scrub typhus with immunochromatographic method 6 was found to be positive. He had a prompt response to Dox-ycycline and became afebrile within 24-36 hours of drug use, he had an uneventful recovery.

Scrub typhus infection remains an important diagnostic

consideration in acute undifferentiated fever (AUF).^[1] an illness characterised by febrile illness of less than two week duration, many differentials clouds the mind of the clinician in this initial weeks of febrile illness the least of which is scrub typhus, resulting it to be called as a seriously neglected disease.^[2]

The predominant consideration of malaria, enteric, and dengue is common in clinical practice; unfortunately, the clinical features of Scrub typhus, are remarkably similar to these other common fevers, viz., chills, myalgia, headache, nausea, vomiting. Pathologic. [3] basis of disease in scrub typhus is a "vasculitis" as the infective organism (O. tsutsugamushi) invades the endothelium resulting in a generalised vasculitis with multi organ involvement, which if not detected and treated early can result in loss of a precious life.

The presence of eschar although helpful has been reported to range from 7-97%. 2, 4 Even when present the usually overlooked locations (axilla, groin, inguinal region, buttocks) predominate re-sulting in missing of eschar in clinical practice, as the practice of general examination after complete disrobing of the patient is now an

exception among physicians. Moreover, absence of pain or itching in the lesion results in non reportage by the patient (as in the present case), seriously jeopardising the diagnosis based on eschar. Considering the lack of diagnostic facilities (ELISA based diagnosis) in rural areas, and the fact that, well conducted studies from south india have found the presence of eschar in half of their patients, a thorough search for it should be made in a sick looking febrile patient, after disrobing him. As the presence of eschar is a clinical pathognomonic feature, and an extremely finding to diagnose scrub typhus with confidence. [4,5,6]

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The authors declared no conflict of interest

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REFERENCES

1. Abhilash KPP, Jeevan JA, Mitra S, et al. Acute undifferentiated

- febrile illness in patients pre-senting to a tertiary care hospital in South India: Clinical spectrum and outcome. *J Global Infectious Dis.* 2016; 8:147-154.
- Daniel H. Paris, Thomas R. Shelite, Nicholas P. Day, David H. Walker. Unresolved Problems Related to Scrub Typhus: A Seriously Neglected Life-Threatening Disease. Am J Trop Med Hyg. 2013; 89:301-307.
- Dogra S. Recent advances in understanding pathophysiology of scrub typhus. JK Science. 2010: 12: 70-71.
- Kundavaram A P, Jonathan A J, Nathaniel S D, Varghese G M. Eschar in scrub typhus: A valu-able clue to the diagnosis. J Postgrad Med. 2013; 59:177-8.
- Rahi M, Gupte MD, Bhargava A, Varghese GM, Arora R. DHR-ICMR Guidelines for Diagnosis and Management of Rickettsial Diseases in India. *Indian J Med Res.* 2015; 141:417-422.
- Blacksell SD, Jenjaroen K, Phet-Souvanh R, Wuthiekanun V, Day NP, Newton PN, Ching WM. Accuracy of access bio Immunoglobulin M and Total Antibody rapid immuno chromatographic assays for the diagnosis of acute scrub typhus infection. Clin Vaccine Immunol. 2010; 17:263-6.