Author’s response to reviews

Title: A case report of scrub typhus complicated with myocarditis and rhabdomyolysis

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Technical Comments:

Authors’ Contributions - Please represent authors' names using their full initials, not their full name, in the Authors’ Contributions section. For example, the initials of John Smith would be ‘JS’. If there are any duplicated initials, please differentiate them to make it clear that the initials refer to separate authors, for example, by adding their middle name initial.

Response: We have edited the part of the text which you above mentioned. Please refer to revised manuscript (Author’s contributions section, line 277-283, page 14)

Thangam Menon (Reviewer 1): No suggestions for improvement

Ranjan Premaratna, MD FRCP (Reviewer 2): A case report of scrub typhus complicated with myocarditis and rhabdomyolysis

Thank you for sending above titled case report for review. This case report highlights a female patient who had myocarditis and rhabdomyolysis at the same time.

Following revisions are required for it to be considered for publication in the BMC infectious diseases.

Revise the case abstract: Case presentation section should include clinical features and important laboratory parameters.
Response: As you mentioned, we have added the clinical features into case presentation section please refer to revised manuscript

(Abstract, clinical presentation section, line 47-48, page 3)

In the discussion, its important to highlight the likely reasons for slow response to doxycycline. Usually Scrub typhus is known to respond to anti-rickettsial antibiotics very rapidly. This patient had been treated with Doxycycline at first presentation to a local clinic and immediately on admission under the care of authors. However has had progressive muscle and cardiac involvement despite treatment and then has shown improvement around day 5. Could this be due to any immunological phenomena?

Response: as you know, the fever usually resolved within 48 hours after anti-biotics treatment. And in our case, the patient showed no fever after admission of our hospital. In our view, the patient had already had complications such as myocarditis and rhabdomyolysis prior to admission to our hospital, so it seemed to take longer than we expected to recover. In addition, although we did not mentioned in our paper, the lack of antibiotic resistance testing and autoimmune antibodies test may be a limitation of our study.

What is the likelihood that this patient would have had leptospirosis co-infection? Which again is known to cause both rhabdomyolysis and myocarditis and respond to doxycycline

Response: although not mentioned in this paper, we performed PCR test on leptospirosis with patient’s serum sample and result was negative. In addition, serum antibody testing using MAT (day1 of hospitalization, day 17 of hospitalization) also showed negative results