Reviewer’s report

Title: A case report of Dengue Haemorrhagic fever complicated with psoas haematoma requiring blood transfusion

Version: 1 Date: 26 Nov 2018

Reviewer: Stephen J Thomas

Reviewer’s report:

General:

Interesting atypical manifestation of a dengue virus infection. The manuscript would benefit from consistency in the use of terms dengue, severe dengue, and dengue hemorrhagic fever, etc. There are a few statements of fact which need to be tightened up. There is some important missing information in the case report and the discussion needs expanding.

Abstract:

"Dengue fever is a tropical infection"

- The manuscript needs consistency in how it refers to dengue clinical disease syndromes. The dengue viruses cause the clinical syndrome known as dengue which, depending on what classification system you apply, may be dengue fever, dengue hemorrhagic fever, or dengue shock syndrome which is the most severe category within the dengue hemorrhagic fever category.

"formed during the critical phase"

- The manuscript would be clearer if the critical phase was described or defined.

"a common tropical infection"

- Dengue is common in the subtropics as well.

Background:

"Expanded Dengue Syndrome (EDS)"

- The term requires a reference. I am not sure the WHO use of the term matches with the authors definition.

"minor musculoskeletal problems"
Dengue is also referred to as "breakbone fever," I am not certain I would call the arthralgias minor.

Case:

"A previously healthy man"

- No age and no past medical history mentioned, both of which are potentially relevant to dengue disease severity.

"the patient was started on critical phase"

- Appears to be an incomplete sentence.

"initial laboratory investigations"

- Is it possible to list the normal range for these labs?

"transfused with 5ml/kg of red cells"

- Between day 7 and 8 there was a minimal drop in hgb but a significant drop in hct. The data are curious and may speak more to intravascular volume depletion versus significance of blood loss. How do the authors explain the hgb and hct kinetics?

"possible secondary infection"

- What appearance gave the indication of potential infection?

Discussion and Conclusions

"All these mechanisms can lead to spontaneous muscle haematomas"

"bleeding is thought to be autoimmunity"

- The authors should explore the coagulation dysfunction AND dengue literature and provide a more comprehensive description of the findings related to trends in factors and other proteins related to clot formation and destruction. For example - Clin Infect Dis. 2002 Aug 1;35(3):277-85. Epub 2002 Jul 11..

"Figure 1 and Figure 2 Haematomas seen in the left psoas muscle"

- The US images would benefit from arrows and pointing out the specific findings.

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

**Does the work include the necessary controls?**
If not, please specify which controls are required in your comments to the authors.

Yes

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Yes

**Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?**
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Not relevant to this manuscript

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Not suitable for publication unless extensively edited

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