Reviewer’s report

Title: Relevant pericardial effusion caused by cytomegalovirus infection in an immunocompetent patient: a case study

Version: 0 Date: 23 Oct 2017

Reviewer: Justin Chow

Reviewer's report:

1. Do you believe the case report is authentic?
   Yes/No
   Yes

2. Do you have any ethical concerns? Please consider if local Institutional Review Board approval or ethical approval was obtained (if appropriate) and if the patient (or their parent or guardian in the case of children under 18) gave written, informed consent to publish this case and any accompanying images. A statement to this effect should appear in the manuscript.
   Comments:
   No

3. Does the Introduction explain the relevance of the case to the medical literature?
   Yes/No
   Not quite

4. Does the article report the following information? Where information is missing, please specify.
   a. The relevant patient information, including:
      - De-identified demographic information (age, gender, ethnicity)
      - Main symptoms of the patient
      - Medical, family and psychosocial history
- Relevant past interventions and their outcomes

Ethnicity not reported

Provided history is vague and missing detail. Family and psychosocial history not provided

b. The relevant physical examination findings

Not provided at all

c. Important dates and times in this case (if appropriate, organized as a timeline via a figure or table); if specific dates could lead to patient identification, consider including time relevant to initial presentation, i.e. initial presentation at $T = 0$, follow up at $T = 1$ month.

d. Diagnostic assessments, including:

- Diagnostic methods
- Challenges (e.g., financial, language/cultural)
- Reasoning and prognostic characteristics (e.g., staging), where applicable

These were provided

e. Types and mechanism of intervention

f. A summary of the clinical course of all follow-up visits

Comments: n/a

5. Is the interpretation (discussion and conclusion) well balanced and supported by the case presented?

Comments:
Conclusion i.e. recommendation to consider this in DDx - is weakly supported

6. Is the anonymity of the patient protected? Please consider any identifying information in images such as facial features or nametags, whether the patient is named etc. If not, please detail below.

Yes/No

Yes

7. Is the Abstract representative of the case presented?

Comments:

Yes

8. Does the case represent a useful contribution to the medical literature?

Comments:

Not in its present form

9. Additional comments for the author(s)?

I read this article with limited interest. While the case itself sounds interesting, the manuscript is riddled with grammatical errors and limited provided information. Little data is provided to guide the actual case with respect to history and physical examination. Labs are not provided, and vague nondescriptive terms like "hemodynamically relevant" are used to describe several aspects of her presentation and subsequent care (in this case, the description of the echo was poor). Finally, the conclusion is only weakly supported by the discussion itself. A pericardial effusion in the context of serositis has a very broad differential diagnosis for which CMV is only one out of many possibilities and judging by the way the case is written, there is little urgency to even consider this as a diagnostic possibility up front when first meeting the patient.

Level of interest
Please indicate how interesting you found the manuscript:

An article of limited interest
Quality of written English
Please indicate the quality of language in the manuscript:

Not suitable for publication unless extensively edited

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