Reviewer’s report

Title: Pericardial effusion and cardiac tamponade requiring pericardial window in an otherwise healthy 30-year-old COVID-19 patient-case report

Version: 0 Date: 01 Jul 2020

Reviewer: Rujuta Katkar

Reviewer's report:

1. Do you believe the case report is authentic?
   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 ethical concerns.

3. Does the Introduction explain the relevance of the case to the medical literature?
   Yes

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

   b. The relevant physical examination findings

   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

   e. Types and mechanism of intervention
f. A summary of the clinical course of all follow-up visits

Comments: This case report included almost all of the information that is needed except family history was not mentioned. Also there was no mention about sputum or blood cultures obtained while making the diagnosis.

5. Is the interpretation (discussion and conclusion) well balanced and supported by the case presented?
Comments: 
Yes, this paper reports case of viral pericarditis causing a pericardial effusion resulting in cardiac tamponade secondary to COVID-19 infection requiring pericardial window in otherwise healthy 30 year old patient. Author was able to demonstrate in the discussion and conclusion relevance of this novel presentation of COVID-19 infection. Also was able to include literature review and was able to incorporate the research available on similar presentation.

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

7. Is the Abstract representative of the case presented?
Comments: 
Yes, the abstract was able to provide short and quick summary of the novel presentation of COVID-19 infection in the form of acute pericarditis causing pericardial effusion and cardiac tamponade requiring pericardial window in an otherwise healthy 30-year-old COVID-19 patient.

8. Does the case represent a useful contribution to the medical literature?
Comments: 
Yes, this paper reports case of viral pericarditis causing a pericardial effusion resulting in cardiac tamponade secondary to COVID-19 infection. Thus signifies the importance of novel presentations of COVID-19 infection that would help in early diagnosis and treatment and also not to focus only on lung pathology as its most commonly seen presentation with COVID-19 infection.

9. Additional comments for the author(s)?
This paper reports case of viral pericarditis causing a pericardial effusion resulting in cardiac tamponade secondary to COVID-19 infection requiring pericardial window in otherwise healthy 30 year old patient. Overall the case report was able to demonstrate importance of rare and unique presentations of COVID-19 infection for timely diagnosis and treatment and not to just focus on lung pathology. Few questions
1. Although it was presumed that she has CAP and was given antibiotics on initial presentation, was there any sputum or blood cultures obtained when patient was again hospitalized?
2. Was the trial of steroids given for treatment of acute pericarditis? I guess with recent increasing evidence of usefulness of steroids in treating COVID-19 patients maybe should consider steroids in patients presenting with severe disease.

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

An article of importance in its field

**Quality of written English**
Please indicate the quality of language in the manuscript:

Acceptable

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Please complete a declaration of competing interests, considering the following questions:

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