Reviewer’s report

Title: Successful treatment of primary bone marrow Hodgkin lymphoma with brentuximab vedotin: a case report and review of published reports

Version: 0 Date: 12 Mar 2018

Reviewer: Jayadev Manikkam Umakanthan

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:

None

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 --> Medical and social history is limited and can be improved. NO family history is included.

   `-- Relevant past interventions and their outcomes --> Please see comments to authors

b. The relevant physical examination findings - Yes
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:

Please see comments to authors

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

Comments: Needs further revision. Please see comments to authors

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

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

Comments: Yes

9. Additional comments for the author(s)?
Kindly address the comments below:

1. Background section, Line 3 - Consider Rephrasing - e.g., Shah et al reported a case of HIV associated PBMHL. Since it is an case report and ideal to avoid strong comments based on such irrespective of that authors verbiage

2. Case presentation, Line 32 - briefly mention prior therapy for Burkitt lymphoma as it is always relevant

3. Line 33 - smoking history should be given in pack years

4. Line 36-39 - Not necessary as it does not add any value

5. Line 41 - Consider Rephrasing - e.g., "Physical exam was normal except for…"

6. Line 43-44. HIV Status should be reported in this context in the wording as well.

7. Line 49 - "and he was FOUND to be EBV-Positive"

8. Line 56 - "However, EBV-DNA TURNED positive

9. Was a PET/Scan done at any point, as it is an important tool particularly in Hodgkin lymphoma

10. Important therapy-related questions:

   a. Is there evidence for the use of DeVIC chemotherapy in such setting? If so, kindly provide reference with brief discussion.

   b. Outcomes with AVD/CHOP-like regimens may have had inferior outcomes in this setting due to nature of the disease. Particularly, ABVD is the best available treatment regimen for HL in general and may not be easily replaced as first line choice by DeVIC. This has to be discussed in more depth why it was chosen.

11. Authors should consider discussing about available reports of HLH and subsequent lymphoproliferative disorders (or Hodgkin lymphoma) in the literature. Presumably, EBV was the driving factor for both but the precedence of HLH in this case has to be noted and discussed

12. Discussion, Lines 50-52: Third reason can be removed as there are phase 3 clinical trials reporting BV with AVD (ECHELON trial results, NEJM 2018) and hence in-vitro data are irrelevant at this point
13. Conclusion of Abstract should be modified to state and describe the outcome in this case and not provide therapy recommendations based on a single case, particularly without addressing comment number 10.

**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:

Acceptable

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

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3. Do you hold or are you currently applying for any patents relating to the content of the manuscript?

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5. Do you have any other financial competing interests?

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