Reviewer’s report

Title: Gingival metastasis from primary hepatocellular carcinoma: a case report and literature review of 30 cases

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Reviewer: Jumpei Kashima

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The authors summarize the clinical course of the patient with gingival metastatic tumor. The lesion is suggested to originate from hepatocellular carcinoma according to the CT scan and histopathological examinations. In addition, they review the previous case reports on metastatic HCC to the gingiva, and try to reveal the clinical and pathophysiological features of the tumor. The effort is admirable; however, there seems to be several critical concerns for publication:

Major comments:

1. The authors mention the age of the patient in the Abstract and Introduction part saying that he is the oldest patient among the previously reported ones with metastatic HCC to the gingiva. Meanwhile, the effect of the aging is not discussed so the impact of aging to the rare form of metastasis is still unclear. I suppose the highest age itself is not reasonable enough to be published.

2. The review of the previously reported cases with metastatic HCC to the gingiva is interesting. The authors demonstrate that treatment for primary HCC and gingival metastasis improved survival by 80 and 15 months, respectively. Although the treatments might have such benefits, it is inappropriate to estimate the effect of the treatment by the data from the patients who achieved the longest survival.

3. The most part of the Discussion is not specific to HCC. Please discuss the possible reason that metastatic HCC to the gingiva is uncommon based on pathophysiological characteristics of HCC. Other tumors (e.g. lung cancer, breast cancer, and renal cancer) can also metastasize to the gingiva. Adding literature search and comparing with such metastatic tumors might give an insight about the mechanism of the rare form of HCC.
Minor comments:

1. Apparent typos and grammatical errors are found throughout the text. Some sentences are hard to understand due to the structure. I strongly recommend to have the manuscript be checked by native English speakers or language editing services.

2. The authors demonstrate that the patient was "treated as a gingival tumor", but they do not reveal what the concrete diagnosis was and which treatment they chose. These information would be useful for readers when they face the similar patients with gingival metastasis.

3. From the microscopic images of the gingival lesion provided in Figure 3, it is hard to recognize the morphological features because the resolution is low. High-magnification images would also be helpful.

**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.

Unable to assess

**Are the conclusions drawn adequately supported by the data shown?**
If not, please explain in your comments to the authors.

No

**Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?**
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

**Quality of written English**
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Not suitable for publication unless extensively edited
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