

## Response to reviewers' comments

We really appreciate the editors and reviewers for their efforts and comments on our manuscript. All reviewers' comments were carefully considered and responded. The following summarizes the response to reviewer comments and suggestions. The corrections are highlighted with track changes in the revised manuscript.

### Reviewer #1 02540325:

The case report is interesting as HCC metastasis in thyroid after resection is never reported. Language correction is needed. References are not uniform, should be corrected.

#### Response:

We are so sorry for the writing and grammar errors. The revised manuscript was thoroughly proofread. And the grammar and spelling errors were corrected with help of MedE professional language editing service. Please find certificate of the language editing service in the supplemental file. The format of the references has been corrected by EndNote. Thank you for your review.

### Reviewer #2 03468910:

The Authors report a case of liver cancer metastasis to the thyroid gland 3 years after partial hepatectomy. Hepatocellular carcinoma metastatic to the thyroid gland is particularly rare. I have some questions to the Authors: 1. what does it mean that the TSH was positive? was the patient euthyroid or not? 2. were the enlarged lymph nodes on the left neck of the central compartment or latero-cervical? why were they not subjected to fine needle aspiration biopsy? Why did the Authors perform a hemithyroidectomy instead of a total thyroidectomy, in consideration that Hashimoto's thyroiditis was associated?

Response: Thanks for your valuable questions. Question1.TSH, TGAB, and TPOAB are higher than normal. Combined with postoperative pathological results, thyroid dysfunction caused by Hashimoto's thyroiditis is considered. Question2.Thyroid ultrasound suggests central lymphadenopathy. We did not choose to perform a puncture biopsy of this lymph node because the patient had already undergone PET-CT, which did not indicate increased lymph node metabolism. It is worth mentioning that we have cleared the lymph nodes in the central area during surgery, and the pathology reports that there is no cancer metastasis. As you mentioned, due to the presence of Hashimoto's thyroiditis, we did not perform a total thyroidectomy, but instead took unilateral thyroidectomy. We have made corresponding changes to the above issues in this article, thank you for your review.

### Reviewer #3 01558248:

1. Please delete the topic of " literature review", because you did not show us the results or table about the systemic review. 2. Please add information from the CT-PET study concerning the liver at the time of metastasis thyroid tumor. 3. Table 1 could be deleted and their contents can be added to the course of case present illness. 4. The format of reference according to the requirement of the journal. 5. Please enrich the contents of the "abstract" where possible.

Response: Question1.As you mentioned, I have removed the words of "literature review" in the title

and thank you for your correction. Question 2. PET-CT suggests postoperative changes in the left outer lobe of the liver, and no metabolic abnormalities are seen. Question 3. We have deleted Table 1 and the corresponding content is reflected in the body of the article. Question 4. The form of the reference has been corrected and meets the requirements. Question 5. We have made corresponding changes to the above issues in this article, thank you for your review.

**Reviewer #4 00053419:**

The authors report a case of HCC metastases in the thyroid after three years resection of the primary tumor in the liver. The manuscript is clear and the main features are properly described. The initial diagnosis (HCC metastasis) should be further explained, is just based on the assumption that the primary tumor was in the liver?

Response: First, the patient was diagnosed with thyroid tumors by thyroid ultrasound, followed by FNH. Pathologically, it is considered to be metastatic tumor, and it is more likely to be considered as a HCC metastasis in combination with the history. There were no metabolic abnormalities in the liver in PET-CT, and we decided to surgically remove the thyroid gland from the affected side. Based on postoperative pathology and immunohistochemistry, we have confirmed thyroid HCC metastasis. We have made corresponding changes to the above issues in this article, thank you for your review.