

Response to reviewer

Dear reviewer:

Thank you for allowing us to review our manuscript to *World Journal of Clinical Cases*. According with your advice, we amended the relevant part in manuscript. Please see below our response in a “point-by-point” fashion. Should you have any questions, please contact us without hesitate.

Thank you.

Sincerely yours,

On the behalf of the authors,  
Da-Fang Zhang  
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Beijing, China

***Summary of the Peer-Review Report:***

- 1) **It would be desirable, to add CT at least of one case. It is important to indicate all metastasis in the figures. In addition, the levels of pre- and post CT section should be identical to confirm the effect of the treatment.**

Preoperative CT and postoperative MRI images were added to the manuscript.

- 2) **In the paper it is mentioned that 4 patients had metastases only in 1 lobe of the liver. It should be explained why only resection of liver was not performed, especially since the authors themselves point out that resection is the method of choice.**

The reason why patients with unilobular tumors do not undergo liver resection was explained in the corresponding position of the manuscript.

- 3) **The phrase "the tumors were located so deeply in the liver that the risk of liver resection was great" needs to be detailed.**

It was explained in detail in the corresponding location of the manuscript.

- 4) **In results and discussion the results of statistical processing are less visible.**

The results of statistical processing are added to the results of the manuscript.

- 5) **The tables need to be refined. It is not clear what the number of hepatectomy 18 means (table N2).**

There were 43 liver metastases in patient No. 5. Fourteen nodules were concentrated in segment V of the liver, and 4 were located on the liver surface. The other 25 nodules were diffusely distributed in the liver. The surgeon removed the nodules in segment V and on the liver surface through hepatectomy. The remaining diffusely distributed nodules were removed by microwave ablation. So the number of liver resections is 18. We added a detailed description in the corresponding position of the manuscript.

- 6) **I think it is better to move this section of the text to the introduction: "Radiofrequency ablation combined with hepatectomy treating neuroendocrine tumor liver metastases have been reported by Taner and Elias respectively.[7, 8] Cryoablation combined with hepatectomy treating neuroendocrine tumor liver metastases have been reported by Saxena.[9] Due to the frequent postoperative complications, long operation times, and more complicated operations, compared with radiofrequency ablation and microwave ablation, the use of cryoablation is rare. [10, 11] Compared with radiofrequency ablation, microwave ablation produces higher local temperature and ablation range. Compared with RFA, microwave ablation heat transfer is not affected by tissue carbonization, which makes the heat transfer more rapid and the ablation more complete. The stronger heat generation efficiency of microwave ablation often makes the operation time of microwave ablation shorter. [12] In addition, microwave ablation has greater advantages in treating nodules larger than 3 cm and nodules close to large vessels. [13, 14] Therefore, our institution attempts to use microwave ablation combined with hepatectomy to treat neuroendocrine tumor liver metastases. This is the first report about microwave ablation combined hepatectomy treating neuroendocrine tumor liver metastasis".**

The section has been moved to the introduction.

- 7) **The text below contained definitely interesting data but thought they need to be ordered more logically: "Historical data show that patients with unresectable liver**

neuroendocrine tumors have a five-year survival rate of only 22%.[15] Ten (90.9%) and eight (72.7%) patients survived respectively in the first year of surgery and three years after surgery in our institution. Taner et al reported that the five-year survival rate and 10-year survival rate of 94 patients with radiofrequency ablation combined with hepatectomy were 80% and 59% respectively.[7] Elias et al reported that the one-year survival rate of 16 patients with radiofrequency ablation combined with hepatectomy was 87.5%.[8] Saxena et al reported that the three-year survival rate and five-year survival rate of 40 patients with cryoablation combined with hepatectomy were 73% and 61% respectively.[9] Research conducted by Zhang et al. showed that the three-year survival rate and five-year survival rate of patients with hepatectomy were 90% and 80% respectively.[6] Therefore, hepatectomy combined with ablation not only expands the surgical indications of patients who do not meet the indications for hepatectomy but also results in a increased survival rate similar to that of hepatectomy. For patients with neuroendocrine tumor liver metastases who are not suitable for hepatectomy, ablation combined with hepatectomy can be used as a new treatment option. In our institution, five (45.5%) patients and two (18.2%) patients survived without progression 1 year after surgery and 3 years after surgery, respectively. The 1-, 3-, and 5-year progression-free survival rates reported by Saxena et al. were 68%, 28%, and 17%, respectively. The 1-year progression-free survival rate reported by Elias et al. is approximately 60%.[8] However, Zhang et al reported that the one-year and three-year progression-free survival rates of patients with hepatectomy were 80% and 60%, respectively.[6] Therefore, microwave ablation combined with hepatectomy may lead to a higher recurrence rate than hepatectomy”.

We revised the paragraph to make it easier for readers to understand.

**8) English language needs to be polished.**

We re-examined the manuscript and corrected any improprieties in it.

**9) Comments from science editor: "The authors did not provide the approved grant application form(s). Please upload the approved grant application form(s) or funding agency copy of any approval document(s)".**

The approved grant application form was uploaded.

**10) Comments from science editor: "The authors did not provide original pictures. Please provide the original figure documents. Please prepare and arrange the figures using PowerPoint to ensure that all graphs or arrows or text portions can be reprocessed by the editor".**

The figure using PowerPoint was uploaded.

**11) Comments from science editor: "The "Article Highlights" section is missing. Please add the "Article Highlights" section at the end of the main text. 6 Recommendation: Conditional acceptance".**

The "Article Highlights" section was added at the end of the main text.