

Reply to the reviewer;

Reviewer 1

1. According to the kind advice of the reviewer we changed the title of the article to “Comparison of unenhanced MRI and Ultrasound in detecting very small hepatocellular carcinoma”.
2. The word “the increased impact” was deleted. So, “AIM” in the “Abstract” was rewritten and “Core tip” was also rewritten.
3. Key word were rewritten, so as to represent the contents of the manuscript.
4. To clarify the “Background”, “Present situation” and “Significance of this article” we rewrote the “Introduction”.
5. According to the kind advice of the reviewer we added the importance of this study in “Discussion”.
6. We mentioned how very small HCC lesions may appear in unenhanced MI or US.; in the unenhanced MRI a very small HCC usually appears as a dark spot in T₁ image and light white spot in T₂ image (see Figure2-5). It is important that characteristics of both T₁ and T₂ images were present at the same time. In the ultrasound images, it usually appears as a dark round spot.
7. How to specify HCC lesions
As we mentioned in the “Materials and Methods”, intense homogenous arterial phase (early enhancement) and early washout in the venous phase in both dynamic CT and angiography were thought as HCC lesions. Of course the characteristic image in unenhanced MRI was included in the diagnosis.

8. In the case of abbreviation words, we cited the total spell at the first citation.
9. We removed results in the “Introduction”.
10. There are two limitations in the unenhanced MRI: I cost is more expensive than ultrasonography II in the case of very tiny HCC (3-5mm in diameter) it is difficult to find by unenhanced MRI. We mentioned it in the “Discussion”.
11. This study was reviewed and approved by our local ethical review committee. And we cited the certificate.

Reviewer 2

1. The title of the manuscript is relatively long and not easy to understand
→we changed the title to “Comparison of unenhanced MRI and Ultrasound in detecting very small hepatocellular carcinoma”
2. The statements about the tumor size is confusing
→we unified to “maximum diameter $\leq 2\text{cm}$) “. We also deleted the repeated description of the diameter.
3. In this study, MRI and US were unenhanced, because we wanted to study the usefulness to survey HCC in the routine follow up study. We mentioned this statement in the “Materials and Method”.
4. The therapy of the 102cases in this study is shown in Table3.
5. The findings of very small HCC in unenhanced MRI were cited in the “Materials and Methods”

Science editor

1. We cited a language editing certificate issued by Medical Service.
2. We cited editorial review certificate (Institutional Review Board Approval).

Company editor-in-chief

We cited Institutional Review Boards official approval.