

Dear Editors:

Thank you for the opportunity to revise our manuscript, *Dynamic MR imaging features of cavernous hemangioma in the manubrium: a case report*. We appreciate the careful review and constructive suggestions. It is our belief that the manuscript is substantially improved after making the suggested edits.

Following this letter are the editor and reviewer comments with our responses in italics, including how and where the text was modified. The revision has been developed in consultation with all coauthors, and each author has given approval to the final form of this revision.

Thank you for your consideration.

Sincerely,

Kai-Hsiung Ko, MD

**REVIEWER #1:**

**1. More MRI scans in Fig.2 should be shown to highlight the dynamic features.**

Thank you for your suggestions. We agree with the reviewer that more MRI images will emphasize the enhancing pattern of sternal hemangioma during the dynamic sequences. However, we retrospectively accessed the images and only early and delayed phase could be obtained. By reviewing the current images, we observe the possible features of manubrium cavernous hemangioma on these sequences of dynamic MRI scans.

**2. The other two cases reported in the available publications should be briefly discussed.**

Thank you for these observations. We agree with the reviewer and have added the following sentences in the Discussion: “Medalion B. et al. described a sternal hemangioma in a 30-year-old woman who had a 2-year history of chest pain. The mass was located in the lower part of the sternum and invaded the sternal cortex on MRI scans. Onat S. et al. presented another case about a 32-year-old woman with anterior chest pain and an enlarging mass. A contrast-enhanced CT scan display an expanding mass and focal destruction of the sternal cortex. The MRI scan was not performed in this patient. Therefore, the dynamic features of MRI were rarely reported in osseous hemangiomas because of the rarity of this tumor.”

**3. How about the operation? The intraoperative images ?**

Thank you for these observations. We have added the Macroscopic appearance of the resected tumor (Figure 3).

**4. The IHC stainings should be provided in the pathology figure.**

Thank you for your suggestions. We agree with the reviewer that IHC stainings will help us differentiate the nature of the tumor. However, we retrospectively contacted with the Department of Pathology and only hematoxylin and eosin stain images could

be obtained. Therefore, we add the description of IHC stainings in the Treatment:  
“The immunohistochemical stains revealed positive on endothelial cell makers  
(CD34, CD31).”

**Science Editor:**

- 1. 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.**

Thank you for your suggestions. We have provided original pictures using PowerPoint file on submission systems.