

Peer Review File

Article information: <https://dx.doi.org/10.21037/vats-23-25>

Reviewer A

"Please include BOTH radiology and histology for this case as I cannot accept this manuscript without showing me the accurate diagnosis of fibrous dysplasia which always entails both radiologic AND histologic correlation. Consider including a pathologist as a co-author (and possible a radiologist as well)."

Reply: Thank you for this recommendation. We have included two new figures showing the findings on CT scan and the histologic view of the biopsy, both of which were consistent with a diagnosis of fibrous dysplasia. We have added as co-authors two pathologists who assisted in obtaining the images and describing them.

Changes in the text: References to figures 1 and 2 now appear **on line 93 and line 96**, respectively.

Reviewer B

"Readers may want to provide a more detailed description of the imaging studies to diagnosis."

Reply: Thank you for this recommendation. We have included a more detailed description of the imaging studies performed (initial CT abdomen, dedicated CT chest, and PET CT scan of the chest) in the text. In addition, we have included images from the dedicated CT chest as Figure 1.

Changes in the text: **Lines 91-94:** "A dedicated CT chest demonstrated an expansile, lytic lesion of the right eighth rib that was stable in appearance from initial imaging and was without malignant imaging features (Figure 1). Positron emission tomography CT revealed moderate hypermetabolic activity within the lesion and could not rule out malignancy. "

"There may be little general information to understand the background of fibrous dysplasia. Have doctors performed adequate pain relief to avoid surgery?"

Reply: Thank you for this recommendation. This is an important point as many patients with fibrous dysplasia do not require resection and can be successfully managed non-operatively. This patient had presented twice to the ED in the year prior to his referral with severe pain associated with the lesion, and while he did not require chronic pain medications to control his symptoms he opted to proceed with surgical resection in order to avoid future pain episodes.

Changes in the text: Lines 96-100: "The patient had presented on two occasions to the emergency department within the prior year due to severe right-sided chest pain but did not require chronic pain medications. After a discussion of the risks and benefits of surgery he opted to proceed with resection in order to achieve definitive symptomatic relief."

“In addition, the authors could consider a brief literature review that the robotic-VATS approach is superior to the conventional VATS approach to provide background on the need for robotic surgery.”

Reply: Thank you for this recommendation. We have expanded our discussion with a brief review of available literature and have included an additional 3 relevant articles that discuss the benefits of a robotic-VATS approach over the conventional VATS approach.

Changes in the text: Addition of references 9-11. **Lines 140-149:** “In the last 5 years there has been an increase in the reporting of robotic-assisted minimally invasive techniques for rib resection, most commonly in the setting of a first rib resection performed for thoracic outlet syndrome (8-10). While there have been no studies to date comparing surgical outcomes in rib resection between a conventional minimally invasive approach and a robotic-assisted minimally invasive approach, benefits of the robotic approach include improved optics, articulation, and operator ergonomics (11). There are potential limitations to the use of the robot in thoracoscopic surgery, and prolonged operative time due to equipment exchanges, patient repositioning, and the docking process may counteract the benefits of this approach (12).”