

PEER-REVIEW REPORT

Name of journal: *World Journal of Clinical Cases*

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Title: Multilocular Thymic Cysts is Easily Misdiagnosed as Malignant Tumor on CT: A Case Report

Provenance and peer review: Unsolicited Manuscript; Externally peer reviewed

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Reviewer's code: 05397484

Position: Peer Reviewer

Academic degree: MD

Professional title: Assistant Professor, Director, Doctor

Reviewer's Country/Territory: United States

Author's Country/Territory: China

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Scientific quality	<input type="checkbox"/> Grade A: Excellent <input type="checkbox"/> Grade B: Very good <input type="checkbox"/> Grade C: Good <input checked="" type="checkbox"/> Grade D: Fair <input type="checkbox"/> Grade E: Do not publish
Novelty of this manuscript	<input type="checkbox"/> Grade A: Excellent <input type="checkbox"/> Grade B: Good <input type="checkbox"/> Grade C: Fair <input checked="" type="checkbox"/> Grade D: No novelty
Creativity or innovation of this manuscript	<input type="checkbox"/> Grade A: Excellent <input type="checkbox"/> Grade B: Good <input type="checkbox"/> Grade C: Fair <input checked="" type="checkbox"/> Grade D: No creativity or innovation

Scientific significance of the conclusion in this manuscript	<input type="checkbox"/> Grade A: Excellent <input type="checkbox"/> Grade B: Good <input checked="" type="checkbox"/> Grade C: Fair <input type="checkbox"/> Grade D: No scientific significance
Language quality	<input type="checkbox"/> Grade A: Priority publishing <input type="checkbox"/> Grade B: Minor language polishing <input checked="" type="checkbox"/> Grade C: A great deal of language polishing <input type="checkbox"/> Grade D: Rejection
Conclusion	<input type="checkbox"/> Accept (High priority) <input type="checkbox"/> Accept (General priority) <input type="checkbox"/> Minor revision <input checked="" type="checkbox"/> Major revision <input type="checkbox"/> Rejection
Re-review	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Peer-reviewer statements	Peer-Review: <input checked="" type="checkbox"/> Anonymous <input type="checkbox"/> Onymous
	Conflicts-of-Interest: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

SPECIFIC COMMENTS TO AUTHORS

Dear author It was a great pleasure reviewing this manuscript. This is an interesting case of a multi-locular thymic cyst. Abstract: Background of the case needs to be better formatted with appropriate grammar check and sentence formation. The authors need to explain in the abstract, what is the main take away lesson from this case. Case report: The laboratory findings can better be organized into a tabular formation for better readers experience. The authors described the mass in the anterior mediastinum is both cystic and solid which needs to be better explained from a radiologic perspective, explaining in the CT images as well. The authors mentioned the CT value in Hu for the pleural effusion, however, failed to do the same for the mediastinal / thymic cystic mass which is the primary target of discussion in this case. I recommend that the authors describe the radiologic findings in a better language and mention the CT value (Hu) to better correlate characteristics of the thymic mass. I recommend to list the tumor markers in a table format as well. The authors did not explain how they concluded with a diagnosis of acute myocarditis, and its etiology. The authors need to explain the etiology of the pleural effusion, whether it was an exudative or transudative effusion,

although it was assumed to be secondary to myocarditis, provide any pleural fluid cytology results, if available. Discussion: it is known that thymic cysts are rare and are located in the anterior superior mediastinum with some of them being cervical as well. Although thymic lesions are incidental findings, given the wide application of CT scans there has been a higher prevalence of thymic lesion, a major fraction of which were identified as thymic cysts. Thymic cysts are diagnosed according to the pathologic diagnostic criteria of the World Health Organization., which should be discussed in the discussion part of the manuscript for better clarity. There might be a consensus among the experts that CT scan is not reliable in making a definitive diagnosis of thymic cystic lesion as benign or malignant. Tissue pathology provides the definitive diagnosis. The authors touched upon the characteristics of the lesion on the CT scan. However, I feel that the authors need to describe the radiologic findings with better language and commenting on the size and shape of the lesion, margins, correlation with surrounding structures, CT value of the lesion, etc. Multilocular or thymic cysts are indeed rare and most of the thymic cysts are monocular. If the authors want to present a rare case of multilocular thymic cyst, then they will need to do a thorough review of literature, describe and tabulate prior reported cases to make their case stronger for publication. The authors called their case as a misdiagnosed case of thymic carcinoma, whereas it is well-known that radiologic findings are not reliable and the tissue diagnosis is a must for definitive diagnosis. The CT is a very good test to diagnose thymic cyst, however, is not reliable enough to differentiate between a benign or malignant thymic lesion. According to one study by Araki et al. where the authors reported 18 cases of thymic cysts with average CT value of 45 Hu, The CT value of 15 cases was larger than 20 Hu and 11 cases were misdiagnosed with Thymoma. The accuracy of preoperative diagnosis is not very high with CT scans and the authors suggested that a diagnosis of thymic cysts only based on CT value and morphology is not reliable Therefore I

recommend, revising the manuscript, stating the take-away lessons with more clarity and provide the review of literature accordingly.