




CASE REPORT

Ectopic Pleural Thymoma Discovered by COVID-19: A Case Report

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ABSTRACT

Ectopic pleural thymoma is a rare entity. In this paper, we present the case of ectopic pleural thymoma discovered in patient with COVID-19.

A case of 49-year-old man with COVID-19 pneumonia who had constant right pleural mass during his hospitalization that was finally diagnosed as ectopic pleural thymoma.

A complete surgical resection was achieved after recovery of patient from COVID-19 and a postoperative diagnosis of WHO type AB, modified Masaoka stage I tumor was attained.

Ectopic pleural thymoma is an uncommon neoplasm that is likely to be discovered by COVID-19. A complete surgical resection is the key for a best prognosis.

KEYWORDS: Ectopic Pleural Thymoma; Covid-19; Computed Tomography

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INTRODUCTION

Thymoma is rare neoplasma originating from the thymic epithelium and accounting 1% of the adult tumors (1).

Here, we report a case of a huge intrathoracic tumor that was discovered during a clinical workup in patient with Covid 19 that finally diagnosed as ectopic pleural thymoma.

CASE REPORT

A 49-year-old man was referred to our hospital with fever and dyspnoea. He had a history of good physical health and no underlying diseases.

The real-time fluorescence polymerase chain reaction (RT-PCR) assay of pharyngeal swabs was positive for COVID-19 nucleic acid upon hospitalization.

Computed tomography of the chest revealed typical for COVID-19 pneumonia with a large mass covering the whole right pleural surface and abutting the right chest wall. No signs of local invasion were identified (Figure 1). After recovery from COVID-19, complete surgical resection was performed with general anesthesia and single lung ventilation via a thoracotomy. A large mass was found on the right lower chest cavity arising from the parietal pleura. No continuity with the thymic gland and the mediastinum was observed (Figure 2).

Histologically, the pleural tumor was encapsulated, measured 19*16*10 cm and weighted 985g. It was

composed of a variable mixture of a lymphocyte-poor WHO Type A thymoma and lymphocyte-rich WHO Type B thymoma components. Immunohistochemical study showed diffuse strong positivity to CK AE1/AE3, positivity to CD5, P63 and TdT. These results were consistent with a type AB pleuralthymoma in accordance to World Health Organization Classification System, and the pathologic stage was stage I on the classification system of Masaoka (2).

Three months after the operation, no recurrence was found by examination.

DISCUSSION

Ectopic thymomas are a rare tumor, accounting for only 4% of all thymomas (3). It originates from aberrant thymic tissue trapped during the embryological migration (4).

Ectopic thymoma occurs in adults, especially in age 40-60 years, with male predominance (4). This tumor is frequently asymptomatic and diagnosed incidentally from the chest radiograph or CT thorax (2). In our case, ectopic pleural thymoma was discovered incidentally.

Myasthenia gravis has been reported in patient with ectopic pleural thymoma (4).

The differential diagnoses for an ectopic pleural thymoma are solitary fibrous tumour, malignant mesothelioma, sarcomas and metastatic tumors (3-6).

The diagnosis of thymoma requires histopathological examination (4). In general, thymoma can be classified according to World Health Organisation (WHO) Classification System or according to Masaoka Staging System (2). The tumor in our patient is WHO type AB thymoma, stage I Masaoka.

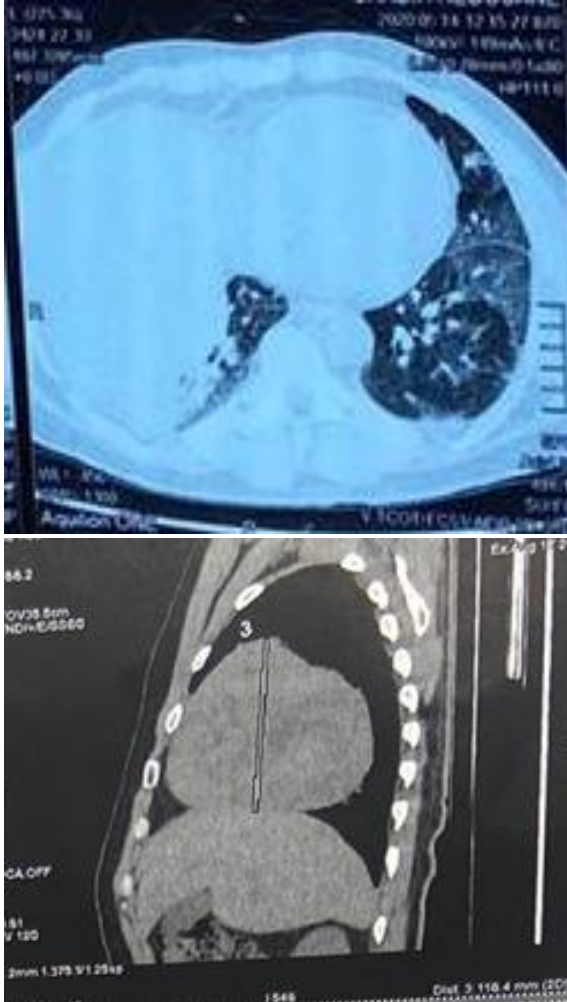


Figure 1 : Thoracic computed tomographic scan showing a right thoracic mass with COVID pneumonia.



Figure 2: Macroscopic view of the pleural thymoma.

Therefore, a complete surgical resection is the key for a best prognosis. Adjuvant chemoradiation should be considered based on staging and resection status and may benefit to reduce local recurrence rates, but without impact on survival, which is 80% at 10 years (2, 5).

The prognostic factors are the completeness of resection and the diameter of the tumor (5). A long follow-up period is essential to avoid a local recurrence (4, 5).

CONCLUSION

Ectopic pleural thymoma is an uncommon neoplasm that is likely to be discovered by COVID-19. A complete surgical resection is the key for a best prognosis.

PATIENT'S CONSENT

Written informed consent was obtained from the patient for the publication of this case report.

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None.

COMPETING INTERESTS

The author declares no competing interests with this case.

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