

CLINICAL IMAGE

Primary pulmonary diffuse large B-cell lymphoma in a young female patient

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Abstract

Even if the patient is young or female, a primary pulmonary diffuse large B-cell lymphoma could be considered as a differential diagnosis of multifocal consolidation in the lung.

KEYWORDS

diffuse large B-cell lymphoma, lung neoplasm, multifocal consolidation, pulmonary

Primary pulmonary diffuse large B-cell lymphoma (DLBCL) is a very rare disease that could be misdiagnosed as atypical pneumonia. Here, we report a primary pulmonary DLBCL in a young female patient. This report could serve as a reminder for differential diagnosis of multifocal consolidation in the lung.

A 21-year-old woman presented to our clinic with complaints of dyspnea and fever for about 1 week. She was Asian, nonsmoker and not in immune-suppressed state. A chest imaging study revealed multifocal consolidation in both lungs (Figure 1A,B). Despite empirical antibiotics treatment, the patient complained of worsening dyspnea. Transbronchial

lung biopsy showed no specific findings or endobronchial lesions. A positron emission tomography computed tomography (CT) scan showed multiple nodular lesions with varying uptake (Figure 2A,B). No extrapulmonary involvement was detected. Finally, primary pulmonary diffuse large B-cell lymphoma (DLBCL) was diagnosed by surgical lung biopsy. Immunohistochemistry showed positivity for CD20, CD79a, CD3, and Ki-67. She finished six cycles of R-CHOP (rituximab, cyclophosphamide, doxorubicin, vincristine, and prednisone) therapy. She attained complete remission. Multifocal pulmonary infiltration and consolidation on chest imaging study may

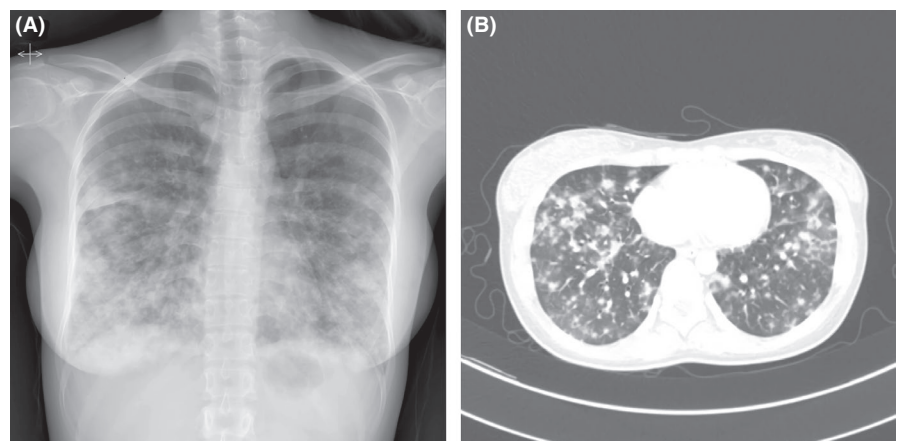


FIGURE 1 Chest X-ray (A) and CT scan (B) revealed multifocal consolidation and ground glass opacities in both lungs

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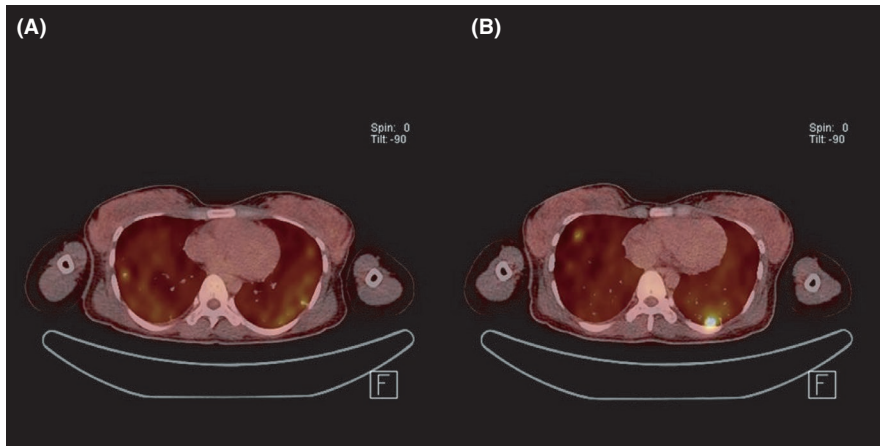


FIGURE 2 PET/CT scan showed multiple nodular lesions in both lungs with varying FDG uptake (A) with highest uptake appeared in a nodule in left lower lobe (B)

mimic the appearance of pneumonia or miliary pulmonary tuberculosis. Primary pulmonary DLBCL is a rare disease, mostly affecting immunocompromised or elderly individuals, mostly around the sixth decade with a male preponderance. Our report could serve as a reminder that primary pulmonary DLBCL might be considered in the differential diagnosis of multifocal consolidation in the lung in a young female patient.^{1,2}

ACKNOWLEDGMENT

None. Published with written consent of the patient.

CONFLICT OF INTEREST

None declared.

AUTHOR CONTRIBUTION

MKK: involved in designing the project and writing the manuscript. DKK: involved in collecting and creating the figures. WH and HYH: involved in manuscript writing and editing. All authors have read and approved the final manuscript.

CONSENT

Appropriate written informed consent was obtained for publication of this case report and accompanying images.

DATA AVAILABILITY STATEMENT

All data generated or analyzed during this study are included in this published article.

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