

中文題目：以組織化肺炎表現的周邊型T淋巴癌之個案報告

英文題目：Peripheral T-cell lymphoma presenting as organizing pneumonia

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An eighty-year-old woman, never-smoker, had persisted dry cough and shortness of breath for one year. She had no fever, hemoptysis, night sweating, nor significant bodyweight loss. Chest plain film revealed bilateral symmetric patchy acinar infiltration. Serial surveys for autoimmune disease, infection, and malignancy were unremarkable. However, symptoms did not improve after empirical antibiotics treatment. Therefore, prednisolone was administered to treat presumed organizing pneumonia, and the chest plain film showed resolution. The steroid was discontinued after two months of treatment.

Four months later, dry cough and dyspnea had recurred again with progression. The plain film showed progression in dense infiltration and consolidation. Chest computed tomography (CT) found multiple small mediastinal lymphadenopathies, bilateral pleural effusion, and symmetric solid consolidation with a peripheral and lower lung distribution. Pathology of CT-guided lung biopsy for the right lower lobe had shown the result of organizing pneumonia. However, the symptoms had progressed despite the use of corticosteroids. In addition, a painless and firm soft tissue mass had developed at the left forearm.

Soon after one month, she developed hypoxemic respiratory failure, requiring mechanical ventilation support despite antibiotics and high dose steroids. We repeated the biopsy from the right lower lung by endobronchial ultrasound-guided method with similar pathologic findings. Finally, an excisional biopsy of a new soft tissue mass at the left arm demonstrated peripheral T cell lymphoma. Meanwhile, the cytology of pleural effusion revealed atypical T lymphocyte hyperplasia, suggesting the possibility of lymphoma with pleural involvement. The final diagnosis was peripheral T cell lymphoma, with lung involvement and the presentation of secondary organizing pneumonia. The patient expired after two weeks of intubation.

#### [Discussion]

Most organizing pneumonia is idiopathic and well responsive to steroids; however, it can be associated with secondary causes, including infection, malignancy, autoimmune disease, and medication. Therefore, a biopsy of the lung is required in cases of organizing pneumonia when atypical presentation and poor response to corticosteroid. Some atypical presentations, like pleural effusion, may hint at a survey for the secondary causes. A definite diagnosis might even be established by the biopsy of the extrapulmonary lesions.

Primary pulmonary lymphoma is relatively rare among primary lung neoplasms. Among pulmonary lymphomas, the marginal zone lymphoma and mucosa-associated lymphoid tissue lymphoma (MALToma) are most common (70-80%) and followed by diffuse large B cell lymphoma. T cell origin lymphoma is rare. Secondary pulmonary lymphoma involvement is more common, especially in new pulmonary lesions and known lymphoma diagnoses. Clinical manifestations are non-specific, including cough, dyspnea, chest pain, hemoptysis with or without B symptoms. Radiological presentations of pulmonary lymphoma could be variable, like solitary or multiple nodules, consolidation, or ground-glass opacities. Central necrosis might be found as well. It is difficult to differentiate from lung cancer, metastatic cancer, pneumonia, or organizing pneumonia clinically. Still, a biopsy is necessary to confirm the diagnosis.

In conclusion, organizing pneumonia is a clinicopathological diagnosis. It is challenging to distinguish idiopathic organizing pneumonia from secondary causes, such as lymphoma. Therefore, biopsy for pathologic examination is crucial to confirm the final diagnosis.