

113 年奇美醫院胸腔內科臨床病例討論會

日期：中華民國 113 年 11 月 12 日(星期二)

時間及地點：16:00-17:00

課程活動題目：Rheumatoid arthritis in CXR

主講人：蔣士仁主任

主辦單位：奇美醫院胸腔內科

課程地點：10 樓討論室

教育積分：台灣胸腔暨重症加護醫學會

參加對象：主辦單位所屬院內醫師

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摘要：

Pulmonary manifestations include:

- Pleural effusions/ Pleural Thickening: Pleural disease is the most common intrathoracic manifestation of rheumatoid arthritis. Up to 5% of patients with RA have radiographic evidence of a pleural effusion sometime during the course of their disease, however, only about 20% of affected patients will be symptomatic. Pleural manifestations are more common in men and in patients with longstanding severe arthritis. Effusions are typically small, unilateral, and associated with periods of active arthritis. The effusion typically resolve over weeks to months with treatment of the active arthritis (but they can last longer). The effusion is characteristically exudative with a low glucose level (less than 50 mg/dl in 75% of patients), low white cell count (less than 5000/mm³), and a low pH (less than 7.2).
- Interstitial lung disease: The interstitial lung disease associated with rheumatoid arthritis is histologically indistinguishable from idiopathic pulmonary fibrosis (UIP), although RA patients uncommonly progress to respiratory failure. A lower lobe predominance is also characteristic. Males are affected more than females. Radiologically detectable disease occurs in about 10-30% of rheumatoid patients. Arthritis precedes development of interstitial lung disease in 90% of cases, and 90% of patients have a positive serum rheumatoid factor. On HRCT findings include sub-pleural nodules (3-30mm) in up to 22% of patients, pseudoplaques, areas of ground glass attenuation (14%), fine reticular interstitial disease with a basilar predominance, and later honeycombing. Necrobiotic nodules: The presence of necrobiotic nodules in the lungs is usually associated with the presence of cutaneous nodules. They are found in fewer than 1% of RA patients. The nodules often develop concomitantly with joint disease, but they may precede the onset of arthritis.

Affected patients are typically asymptomatic, although cough, dyspnea, and hemoptysis have been described as presenting symptoms. The nodules are more common in men and can range in size from 0.5 to 7.0 cm. Nodules do not calcify, are usually peripheral, and have an upper and mid-lung predominance. Cavitation may be identified in up to 50% of nodules. The nodule is often centered on a necrotic inflamed blood vessel, suggesting that vasculitis may be the initial insult. The clinical course of patients with rheumatoid pulmonary nodules is usually benign. The nodules may resolve spontaneously, recur, or develop at one site while resolving in another.

- **Caplan's syndrome:** Caplan's syndrome is characterized by rheumatoid arthritis with pulmonary rheumatic nodules in coal workers typically with preexisting mild pneumoconiosis. The nodules typically measure between 0.5 to 5 cm in size and may cavitate. **Drug induced lung disease:** Drugs used in the treatment of rheumatoid arthritis have also been associated with the development of interstitial lung disease. Drug induced interstitial pneumonitis can occur in 5% to 10% of patients treated with methotrexate. It characteristically elicits no eosinophilic response and will resolve when the drug is discontinued. Interstitial pneumonitis is also associated with gold therapy. The pneumonitis also usually resolves when the drug is stopped.
- **Pulmonary arteritis and pulmonary hypertension:** Systemic vasculitis in patients with rheumatoid arthritis is rare. The most common presenting symptom is hemoptysis in the setting of a pulmonary-renal syndrome. Treatment usually involves corticosteroids and cyclophosphamide.
- **Airway Disease:** Airway disease has only recently been described in patients with RA. Bronchiectasis and bronchiolectasis have also been identified in up to 30% of patients. Bronchiolitis obliterans, constrictive bronchiolitis, and follicular bronchiolitis have also been described. Pericarditis (20-50%) or myocarditis