Sarcoidosis with Multiple Pulmonary Nodules: A Case Report and Literature Review

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Background: Lung involvement occurs more than 90 percent of sarcoidosis patients, with usual chest x-ray showing hilar lymphadenopathy and pulmonary infiltrations. Here we present an unusual sarcoidosis case with multiple pulmonary nodules.

Case Presentation: A 32-year old, previously healthy, 15 pack-year current smoker male presented with a 4-month history of masses in both neck and left elbow. He didn’t have any recent history of traveling. The chest X-ray showed bilateral hilar bulging appearance, with nodules in both lung fields. Chest computed tomography (CT) revealed multiple lymph node enlargements in both lower neck, mediastinum, axilla and abdomen, along with multiple well-defined nodules with variable size range from 0.5 cm to 3.5 cm in both lung bases. Sputum culture for mycobacteria and interferon gamma releasing assay showed negative.

Results: Biopsy of his right neck lymph node was done, which showed chronic granulomatous inflammation with very focal necrosis. He was initially treated with tuberculosis medications, but showed no improvement. He underwent biopsy once more, for one of lung nodules through percutaneous needle biopsy for pathologic confirmation, which also showed chronic granulomatous inflammation without necrosis. Baseline serum angiotensin converting enzyme (ACE) level was 49.5 U/L. Thus, he was diagnosed as having sarcoidosis. His lung nodules and masses in neck and elbow have been improved without any treatment.

Conclusions: We presented a case with sarcoidosis showing multiple pulmonary nodules, which has been rarely reported before. Sarcoidosis is a multi-organ disorder, and it can have nonspecific presentation of symptoms, clinical suspicion and appropriate pathologic confirm is necessary to make a correct diagnosis.

A Case of Desquamative Interstitial Pneumonia with Elevated Levels of Eosinophils in the Bronchoalveolar Lavage Fluid

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Desquamative interstitial pneumonia (DIP) is rare, and the characteristic bronchoalveolar lavage fluid (BALF) findings in patients with this disease are still not well characterized. We present a case of DIP that was initially misdiagnosed as chronic eosinophilic pneumonia due to the presence of increased number of eosinophils in the BALF.

Case report: A 56-year old man, who was a current smoker, presented with productive cough for 1 month. High-resolution computed tomography (HRCT) showed multifocal patchy ground glass and reticular opacities predominantly in the subpleural area of both lungs. BALF examination revealed elevated levels of eosinophils (37%) in contrast to the slight increase in peripheral blood eosinophil levels (7%). He was initially diagnosed with chronic eosinophilic pneumonia based on the HRCT and BALF findings and was administered prednisolone (0.5 mg/kg/day). However, his symptoms and the diffused infiltrative shadows on HRCT did not show improvement during the 2-month follow-up. Video-assisted thoracoscopic lung biopsy was then performed. The biopsy specimen revealed an increased number of macrophages that had accumulated in the alveolar space, which was consistent with DIP. We discontinued prednisolone treatment and recommended smoking cessation; however, his symptoms and radiological findings gradually worsened during the 2-month follow-up. Therefore, we once again administered prednisolone (1 mg/kg/day). His symptoms and the HRCT findings markedly improved thereafter.

Influence of Epidemiological Profile in the Clinical Expression of Sarcoidosis: Study of 160 Patients with Systemic Disease

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Background: To analyse the influence of the epidemiological profile in the disease expression of a large series of patients with sarcoidosis.

Methods: Study cohort including 160 patients diagnosed with sarcoidosis in the last 10 years. The diagnosis of sarcoidosis was based on clinical criteria and imaging studies, together with the histopathological demonstration of non-neocrotizing granulomas, and excluding other granulomatous diseases, mainly infectious (tuberculosis).

Results: There were 106 women and 54 men, with a mean age at diagnosis of 46.87 years. The main clinical manifestations present at diagnosis were respiratory symptoms (40%), followed by general symptoms (31%), skin lesions (29%) and the incidental finding of imaging findings in asymptomatic patients (18%). 37% of patients had a disease onset <40 years. This early onset of disease was reported mainly in males (44% vs 28%, p=0.027) and was associated with a higher frequency of general symptoms (42% vs 25%, p=0.023), erythema nodosum (28% vs 16%, p=0.041), uveitis (14% vs. 5%, p=0.05) and joint involvement (17% vs 5%, p=0.014), but with a lower frequency of interstitial lung disease (25% vs 42%, p=0.028) and splenic involvement (0% vs 7%, p=0.037). With respect to the differential presentation of the disease according to gender, women diagnosed with sarcoidosis had a higher mean age at diagnosis (48.8 vs 42.8 years, p=0.017), a higher frequency of skin involvement (35% vs 13%, p=0.003) and a lower frequency of pulmonary (34% vs 52%, p=0.022), hepatosplenitic (2% vs 9%, p=0.044) and nervous system (3% vs 13%, p=0.032) involvements in comparison with males.

Conclusions: An early disease onset (<40 years) was mainly associated with general and cutaneous involvement, while sarcoidosis in men affects more frequently vital organs.