

RECURRING MASSIVE PLEURAL EFFUSION AS AN UNUSUAL MANIFESTATION OF SYSTEMIC LUPUS ERYTHEMATOSUS – CASE REPORT

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BACKGROUND

Systemic Lupus Erythematosus (SLE) is a chronic multisystem autoimmune disease characterized by abnormal production of autoantibodies and a heterogeneous clinical presentation. Respiratory involvement affects between 20 and 90% of patients, with pleural involvement being the most common. Lupus pleuritis can be asymptomatic but often presents with pleuritic pain, dyspnea, and cough. It can be associated with pleural effusion, typically bilateral, exudative, and small volume. We report an unusual case of lupus pleuritis.

CASE REPORT

A 22-year-old female with SLE since 2019, using hydroxychloroquine, prednisone, and azathioprine, with regular follow-ups at the Rheumatology outpatient clinic. In February 2023, the patient presented with left pleuritic chest pain and exertional dyspnea, which progressively worsened to dyspnea with minimal effort despite antibiotic treatment at the emergency department. On physical examination, she revealed an abolished vesicular murmur in the lower two-thirds of the left hemithorax. The chest radiograph showed a voluminous pleural effusion on the left. Laboratory tests showed hypochromic microcytic anemia (MCV 70 fl, MCH 23), hypocomplementemia (C3 63 mg/dl; C4 8 mg/dl), leukopenia (2680 cells/uL), and lymphopenia (255 cells/uL). The pleural fluid analysis showed 1300 cells (PMN 67%), ADA 14.8 U/L, glucose 96 mg/dL, pleural LDH 222 U/L, pleural/serum LDH ratio = 0.7, and pleural/serum total protein ratio = 0.66. Testing for tuberculosis, fungi, and bacteria was negative. During the hospital admission, the pleural effusion often recurred, requiring four thoracentesis. Pleuroscopy with biopsy showed chronic pleuritis, consistent with lupus pleuritis.

CONCLUSION

Although uncommon, massive unilateral pleural effusion can be an atypical manifestation of SLE and should be considered in the differential diagnosis. It is essential to rule out other causes of massive pleural effusion. Massive pleural effusion in lupus pleuritis may be steroid-resistant, requiring more aggressive immunosuppression.

KEYWORDS: Systemic lupus erythematosus, Pleural effusion, Pleuritis.