EOSINOPHILIC PNEUMONIA AS THE ONSET OF RHEUMATOID ARTHRITIS A RARE ASSOCIATION

Heitor Furlan Giordano^{1,*}, Isabele Parente de Brito Antonelli¹, Cipriano Gama¹, Thales Ishizaki¹, Carla Baleeiro¹, Karina Bonfiglioli¹, Ana Cristina de Medeiros Ribeiro¹, Guilherme das Posses Bridi¹, Ellen Caroline Toledo do Nascimento¹, Ana Carolina de Brito Lyra¹

1.Universidade de São Paulo, São Paulo (SP), Brazil.

*Corresponding author: heitor.furlan.giordano@gmail.com

BACKGROUND

Eosinophilic pneumonia (EP) is characterized by pulmonary symptoms, radiographic abnormalities and evidence of eosinophilia. Other causes of eosinophilic pneumonia, such as infections, drugs, and vasculitis, should be excluded. It can present with an acute or chronic onset, has an excellent response to corticosteroids and a relapsing course. There are few reports of association of EP with rheumatoid arthritis (RA).

CASE REPORT

A 41-year-old woman, without prior comorbidities, was admitted in another institution with progressive dyspnea and cough for one month. High resolution computerized tomography (HR-CT) of the chest revealed diffuse ground-glass infiltrates and a consolidation focus on the right pulmonary base. Due to a first hypothesis of bronchopneumonia, empirical antibiotic treatment (meropenem and vancomycin) was started, without clinical improvement. For further investigation, a bronchoalveolar lavage and transbronchial biopsy were performed. Two months after the onset of symptoms and one week after biopsy, the patient was transferred to our hospital, in order to conclude the investigation. However, the patient deteriorated clinically, progressing to respiratory failure requiring mechanical ventilation, complicated by pneumothorax. A review of the previous pulmonary biopsy evidenced organizing eosinophilic pneumonia, with negative tests for infectious diseases. Intravenous methylprednisolone 60 mg/day was introduced. Progressive clinical and radiological improvement was observed, and the patient was extubated and discharged within approximately 2 weeks, without domiciliary oxygen therapy. During hospitalization, the patient complained of mild arthralgias in hands and wrists, which worsened as prednisone was weaned. Two months after discharge, the patient was evaluated in an outpatient clinic, presenting synovitis in hands and wrists and a 2-hour-long morning stiffness. She was still taking prednisone 10 mg daily. Further investigation demonstrated normal complement, ANA and ANCA nonreactive and negative viral serologies. Rheumatoid factor (39.8 UI/mL) and anti-CCP (168 U/mL) were positive in high titers. Methotrexate was introduced (20 mg weekly). In the 24 week-reassessment, the patient had a partial response, still presenting synovitis, but no respiratory symptoms. The new HR-CT showed resolution of all consolidations. Leflunomide 20 mg daily was introduced. The patient remains in outpatient follow-up.

CONCLUSION

Among several possible pulmonary manifestations in RA, EP is uncommon. There are few reports in the literature, and most of them occurred during established articular disease. The current case shows an atypical, severe and rare presentation of EP, preceding RA's diagnosis. It is unknown if EP occurs secondarily to RA's systemic inflammatory activity, or if both diseases share a common pathogenic mechanism, with eosinophilic activation.

KEYWORDS

Rheumatoid, Arthritis, Pneumonia, Eosinophilic.