A 25-year-old woman suffered from sinusitis, asthma and chronic cough intermittently for 1 year was admitted due to persistent worsening cough for 2-3 weeks. Her examination revealed a weakness in appearance and initial blood test results showed marked eosinophilia: WBC of 14100/cumm, neutrophil at 49%, lymphocyte at 13%, and eosinophil at 32%. Chest x-ray showed bilateral pulmonary nodules (Fig. 1) and computed tomography (CT) scan also demonstrated multiple peripheral pulmonary nodules, which suggested chronic eosinophil pneumonia (Fig. 2). However during hospitalization, her sputum TB, fungus, and bacteria cultures all showed no growth. In addition, sputum cytology, serum anti-nuclear antibody, antineutrophil cytoplasmic autoantibody and serum rheumatoid factor results were all negative. Bone marrow biopsy demonstrated eosinophilia and serum total eosinophil count increased up to 13030 /cumm. After treatment with prednisolone, she was discharged under the diagnosis of Churg-Strauss syndrome in a stable condition and her follow-up CT scan showed almost complete remission.
Comments

Churg-Strauss syndrome is a rare systemic vasculitis and the clinical diagnostic criteria are asthma, blood eosinophilia greater than 1500/μL, and of vasculitis involving two or more extrapulmonary organs. In addition, allergic rhinitis, nasal polyps, and sinusitis are common accompanying features. The lungs, skin, and nervous system are the most common sites of involvement for patients with this disease\textsuperscript{(1,2)}. The original pathologic description reported by Churg and Strauss and the classic pathologic findings in the lung include a combination of eosinophilic pneumonia, granulomatous inflammation, and vasculitis\textsuperscript{(3)} The most common chest radiographic findings include transient patchy alveolar opacities, while diffuse interstitial infiltrates or nodular densities occur infrequently\textsuperscript{(4)}. Most patients are treated with corticosteroids, although immunosuppressive drugs, usually cyclophosphamide, may be added in some cases. The prognosis is good, however, remission occurs in the majority of patients. Cardiac involvement with myocardial infarction or congestive heart failure is the most common cause of death\textsuperscript{(5)}.

References