HYPEREOSINOPHILIA AND CHRONIC EOSINOPHILIC PNEUMONIA IN A PATIENT WITH BRONCHIAL ASTHMA: ANALYSIS OF THE CLINICAL CASE

Yu. V. Huba, L. I. Konopkina

Dnipro State Medical University, Dnipro, Ukraine

Abstract. The article presents a clinical case of lung parenchymal involvement in a patient with bronchial asthma and hypereosinophilia. Hypereosinophilia is the presence of a high eosinophil count in peripheral blood (>1500 cells/μL). Hypereosinophilic syndrome encompasses a heterogeneous group of pathological conditions characterized by a persistent and significant elevation of eosinophil levels (>1500 cells/μL) and their mediators in peripheral blood, which can lead to organ and tissue damage. One manifestation of hypereosinophilic syndrome with lung involvement is chronic eosinophilic pneumonia, which was suspected in the described clinical situation. Chronic eosinophilic pneumonia is an idiophatic disease characterized by hypereosinophilia and abnormal, extensive accumulation of eosinophils in the interstitium and alveolar spaces of the lungs. Among patients with chronic eosinophilic pneumonia, women predominate (2:1), and approximately 75 % of affected individuals suffer from bronchial asthma. Peripheral blood hypereosinophilia is one of the diagnostic criteria for chronic eosinophilic pneumonia, typically exceeding 5000–6000 cells/μL. Characteristic signs of chronic eosinophilic pneumonia on chest computed tomography include peripheral opacities, which are often migratory. The presented clinical case fully corresponds to the scientific literature data on chronic eosinophilic pneumonia. However, this condition must be distinguished from other pathological states associated with hypereosinophilia and lung involvement, such as parasitic infections and myeloproliferative diseases, which were excluded in our patient. Particular attention should be given to the differential diagnosis between chronic eosinophilic pneumonia and eosinophilic granulomatosis with polyangiitis, as in the latter case, hypereosinophilia and lung involvement may represent an early stage of disease progression. Patients with bronchial asthma are at increased risk of developing eosinophilic lung involvement, necessitating complete blood counts and radiological imaging when atypical symptoms appear.

The treatment and follow-up of patients with chronic eosinophilic pneumonia should be long-term, considering the possible recurrence and the likelihood of transformation into eosinophilic granulomatosis with polyangiitis.

Key words: hypereosinophilia, chronic eosinophilic pneumonia, eosinophilic granulomatosis with polyangiitis, bronchial asthma.