HYPEREOSINOPHILIA AS A RISK FACTOR OF PULMONARY EMBOLISM IN PATIENTS WITH ONCOLOGICAL DISEASES IN THE INTERNIST`S PRACTICE

O. V. Myronenko, Y. V. Huba, L. I. Konopkina
Dnipro State Medical University, Dnipro, Ukraine

Abstract. Pulmonary embolism is an urgent problem today. Diseases of the cardiovascular system, hereditary factors of impaired hemostasis, childbirth and pregnancy, surgical interventions, injuries, immobilization, dehydration, etc., can be risk factors for increased blood clot formation. In addition, one of the factors that significantly increases the risk of thrombosis is malignant neoplasms. It should be noted that there are factors that are rarely mentioned in the scientific literature as a risk factor for thrombosis, for example, blood hypereosinophilia. An increase in the level of eosinophils in peripheral blood can occur against the background of allergic and autoimmune diseases, parasitic and fungal infections, some diseases of the gastrointestinal tract, bone marrow diseases. The article reveals the pathogenetic basis of the influence of hypereosinophilia on the risk of thrombosis. Hypereosinophilia syndrome is closely associated with thrombosis, which may recur despite adequate anticoagulation or warfarin therapy. Eosinophils accumulate and express tissue factor and after its activation can initiate coagulation. The article describes the clinical case of a patient with lung cancer, which was accompanied by a leukemic reaction in the form of hypereosinophilia, and was complicated by deep vein thrombosis of the lower extremities and pulmonary embolism. The example of a clinical case shows the complex mechanism of hemostasis disorders against the background of the presence of a malignant neoplasm, especially when combined with paraneoplastic hypereosinophilia, which is an additional risk factor for the development of treatment-resistant venous thrombosis of various locations and thromboembolism of the pulmonary artery and requires preventive anticoagulation therapy, as well as more intensive and long-term anticoagulant therapy when deep vein thrombosis and pulmonary embolism has already developed.

Key words: Pulmonary embolism (PE), hypereosinophilia, paraneoplastic hypereosinophilia, pulmonary cancer, dyspnea, hemoptysis, thrombosis.