## ANAPHYLACTIC SHOCK: MODERN ACHIEVEMENTS AND APPROACHES TO TREATMENT

Yermak O., Hryshyna I., Moroz H.
Kharkiv National Medical University
Department of internal medicine No 2, clinical immunology and allergology named after academician L.T. Malaya
Kharkov, Ukraine

The World Health Organization (WHO) called the XXI century "The century of allergies", because this pathology takes on the scale of a pandemic in recent years. Thus, according to WHO, in the period from 2001 to 2010, the number of patients with allergic pathology increased by 20 % and according to experts by 2025 this index will increase to 50 %. Anaphylactic shock is an immediate type of allergic reaction, accompanied by life-threatening clinical manifestations (a sharp decrease of blood pressure, abnormal functioning of the central and peripheral nervous systems, endocrine disorders, respiratory failure, etc.). According to foreign data, its prevalence is as follows: 0,7-10 % among patients who received injections of penicillin; in 0,5-5 % of bitten or stung by insects; 0,22-1 % among patients who received injections of radiopaque drugs; in 0,004 % of patients with food allergies (or cross-allergy); 1 for 3 500-20 000 injections of general anesthetics; 1 in 10,000,000 injections of allergens in the process of allergen-specific immunotherapy (ASIT). The primary treatment for anaphylactic shock is the immediate administration of epinephrine, which is the first line of treatment for anaphylaxis. Epinephrine should be injected intramuscularly into the outer part of the thigh 0.01 mg/kg of solution 1: 1,000 (1 mg/ml) maximum 0,5 mg (adults) or 0,3 mg (child) (or the "Epipen"). Repeated doses of epinephrine should be injected to patients who require it at least every 15 minutes. In case of an inadequate response to two or more doses of epinephrine intramuscularly, it can be injected as an infusion with appropriate cardiomonitoring in the emergency department, intensive care unit accompanied by doctors. Systemic blockers of the H1 and H2 receptors can alleviate the skin symptoms of anaphylaxis. Systemic glucocorticosteroids can be used because they can reduce the risk of late phase respiratory symptoms. Patients exhibiting respiratory failure should be carefully examined for at least 6-8 hours. Patients who showed instability of blood circulation should be examined within 12-24 hours.