

Koliubaieva Olena

Features of infective endocarditis in injecting drug addicts on clinical example

Kharkiv National Medical University

Department of Internal Medicine No. 3

Kharkiv, Ukraine

Research advisor - ass. Kulikova M.V.

Introduction. The incidence of infectious endocarditis (IE) among injecting drug addicts (IDAs) is 5-10% per year, which is significantly higher than the incidence rate in the general population. It was found that in 75-80% of cases IE develops on the right side in IDAs, in comparison with 9% in nonaddicts, and in 40-70% of cases the tricuspid valve is affected. The course of the disease has atypical manifestations, so untimely diagnosis and treatment of IE often leads to the development of multi-organ failure. Young age of patients and high lethality (40-60%) make the problem of IE in addicts not only medical, but also social.

Aim: to study the features of the clinical course, diagnosis and treatment of IE in a patient with intravenous drug use.

Materials and methods. We conducted an examination and analyzed the patient's medical history, who was hospitalized in the Department of Cardiology of the Kharkiv Regional Clinical Hospital.

Results. Patient A., 29 years old, diagnosed: Infective endocarditis of tricuspid valve, active phase. Insufficiency of tricuspid valve 2 degree, heart failure II B with preserved fraction of left ventricular ejection. Pulmonary hypertension. Hypochromic anemia. Community-acquired pneumonia, midsection, III clinical group. Pulmonary insufficiency I-II degrees. From an anamnesis it was found out that the patient used opiates intravenously about four years. Tests for HIV, HBV, HCV were negative. The

patient received complaints about a cough with scant sputum, pain under the scapula on the left, headache, weakness. In the course of further research, signs of heart failure appeared, and echocardiography showed vegetations on the tricuspid valve, which are the direct sign of IE. The main mechanism of the endocarditis's pathogenesis of the right heart in IDAs is not disclosed, but the following main theories highlight: damage of the valve's endothelial by the particles of the drug; pulmonary hypertension and increased cardiac turbulence caused by drug use; increased expression of molecules capable of binding microorganisms in the right heart. According to the results of microbiological analysis of sputum, the causative agents of IE were *Streptococcus viridans* and *Candida albicans*. To eliminate them, antibiotics of the group of aminoglycosides and tricyclic glycopeptides were used, and an antifungal agent from the group of triazoles was used too. The course of treatment of heart failure according to the protocol was also conducted. After the course of conservative therapy, the patient was made plastic valve operation in the Amosov National Institute of Cardiovascular surgery.

Conclusions. IE in IDAs has the following features: acute course, preferent damage of the right heart and tricuspid valve, atypical clinical picture, development of septic thromboembolia with the formation of infarct-pneumonia. Combined specific antibiotic therapy, drugs for correction of heart failure should be used for treatment, but the main method of treatment of IE IDAs is the surgical operation.