## PULMONARY ARTERY THROMBOEMBOLISM: CLINICAL FORMS, HAEMODYNAMICS SIGNS AND PECULIARITIES

## OF THROMBUS FORMATION

## A. I. Iachnik, O. V. Shnyrkova, V. A. Iachnik, V. V. Studnikova Abstract

Venous thromboembolism (VTE) is a challenging condition for the physicians worldwide which includes deep venous thrombosis (DVT) and pulmonary artery thromboembolism (PATE). VTE has a trend to increase: PATE holds the third place among all cases of death after stroke and coronary artery disease. Acute PATE, relapsing PATE and chronic postembolic pulmonary hypertension (CPEPH) are distinguished among clinical forms of PATE. These clinical variants have common clinical presentation but different functional and laboratory features.

Based on the results of retrospective analysis of 245 cases of PATE, admitted to Heart center in 2013–2014, acute PATE was diagnosed in 188 (77 %) patients, relapsing PATE with 2–6 episodes — in 31 (12,7 %) patients, CPEPH — in 25 (10,3 %) patients. DVT was diagnosed in 24 % in CPEPH, 22,6 % in relapsing PATE and 33 % in acute PATE patients. Mean pulmonary artery pressure was (34,2  $\pm$  1,1), (47,0  $\pm$  3,0) and (46,4  $\pm$  3,7) mm Hg respectively.

Good left ventricle contractility due to under-load of left ventricle and pulmonary hypertension, paradoxical systolic movement of ventricular septum and its hypertrophy (1,05  $\pm$  0,03 cm) in 20,0 % of cases and increasing tricuspid regurgitation due to right ventricle dilation were typical findings for groups 2 and 3 patients.

Relapsing PATE and CPEPH in contrast to acute PATE were accompanied by disturbances of fibrinolytic and blood coagulation systems, manifested in statistically significant elevation of serum D-dimer and fibrinogen concentration.

**Key words:** pulmonary artery thromboembolism, acute PATE, relapsing PATE, CPEPH, blood coagulation and fibrinolytic systems.

Ukr. Pulmonol. J. 2016: 1:23-28.

Anatoliy I. lachnik, SI "National institute of phthisiology and pulmonology named after F. G. Yanovsky NAMS of Ukraine" Clinical-functional department Leading research assistant Doctor of medicine, professor Tel/fax: +038 (044) 275 70 85, a-yachnik @ukr.net