

Evaluation incidence of Chronic Thromboembolic Pulmonary Hypertension after Acute Pulmonary Embolism in patient who admitted in Imam Reza Hospital

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Introduction: Chronic Thromboembolic Pulmonary Hypertension (CTEPH) is a late complication of pulmonary thromboembolism (PE) is associated with high morbidity and mortality. Although the pathogenesis is not fully understood the damage caused to the incidence and frequency of this complication has a wide range. The aim of this study was to evaluate the incidence of chronic pulmonary hypertension after first episode of acute pulmonary embolism.

Methods: In a cohort study (cohort), 101 patients with acute embolism who had undergone for anticoagulant therapy were follow-up at least one year. Patients presenting with symptoms dyspnea were selected. Echocardiography was performed first time in this patients, symptoms of right heart failure and increased of pulmonary artery pressure above 35 mmHg were studied.

Results: 101 patients with a mean age of 85.2 ± 17.7 years 57 male (56.4%) and 44 female (43.6%) were treated with a diagnosis of acute pulmonary embolism were follow up. %77.2 of patients had idiopathic pulmonary embolism and %22.8 were the underlying cause. During follow-up, 23 patients (22.8%) were experiencing of dyspnea. Echocardiography in 13 cases were normal and 10 cases had signs of right heart failure and pulmonary artery pressure. The overall incidence of chronic pulmonary hypertension was 9.9%. Demographic data and CT angiography findings are not associated with incidence of hypertension.

Conclusion: Chronic pulmonary hypertension is a serious complication of acute pulmonary embolism the incidence of pulmonary hypertension after pulmonary emboli is relatively high. Age and gender does not influence its development. CT angiography in the initial pulmonary embolism is no relationship between with chronic pulmonary hypertension occurs.

Key words: Acute pulmonary embolism, Chronic hypertension, Echocardiography