**MORTALITY OF PULMONARY EMBOLISM TREATED WITH SYSTEMIC OR INTRAPULMONARY THROMBOLYSIS: A SINGLE CENTER, 10-YEAR RETROSPECTIVE STUDY**

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*Background*: Acute massive pulmonary embolism (PE) is a serious life-threatening condition. In patients who is contraindicated for surgical embolectomy. Medical reperfusion by systemic thrombolysis or intrapulmonary artery thrombolysis are options for treatment. However, the data are still limited.

*Objective*: To assess mortality and complications of patients with acute PE treated with systemic or intrapulmonary thrombolysis.

*Method*: A retrospective study of consecutive patients with acute PE treated with systemic thrombolysis (systemic group) or intrapulmonary thrombolysis (intraPA group) at King Chulalongkorn Memorial hospital. Demographics, hemodynamics data, complications and mortality were gathered from medical records. Chi-square and T-tests were used.

*Results*: Sixty five patients were included (mean age 56 years, 56.9% were diagnosed as massive PE, 52.3% were received intraPA thrombolysis). Thirty-day mortality was 26.2% in all PE combine. The 30-day mortality rate was higher in systemic group compared to intraPA group (41.9% and 11.7% in systemic and intraPA group, respectively, P= 0.006). Pre-treatment blood pressure (SBP) was 101.9+- 24.2 mmHg (97.6+-25.9 mmHg in systemic thrombolysis group, 105.3+-22.4 mmHg in intrapulmonary thrombolysis group, P= 0.21), Right ventricular systolic pressure was 41.06+-16.66 mmHg (58.4+-18.8 mmHg in systemic thrombolysis group, 55.7+-16.2 mmHg in intrapulmonary thrombolysis group, P= 0.58). Six patients (9.2%) had major bleeding, all of them were on systemic thrombolysis group.

*Conclusions*: Pulmonary embolism is associated with high mortality rate. The role of intrapulmonary thrombolysis in high risk PE is promising. All-cause mortality and bleeding complication is significantly lower in these group compared to the one who received systemic thrombolysis. A larger, controlled study is needed to prove the efficacy of the intrapulmonary thrombolysis in acute PE.