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**Background:** Acute pulmonary embolism (APE) is a common and a potentially fatal disorder if not promptly diagnosed and treated. The risk assessment of these patients is crucial. The aim of this study was to determine the predictors of early and long-term mortality in patients with APE.

**Methods:** One hundred and twenty-one patients were enrolled prospectively. All patients were admitted to our emergency unit and the diagnosis of all patients was confirmed with computed tomographic pulmonary angiogram (CTPA). Clinical and demographic characteristics of all patients were collected. Patients were followed up for 21.6±8.8 months.

**Results:** Mean age of patients was 61.6±17.5 years and 55.4% were female. In the univariate analysis, in-hospital mortality was related to cyanosis, syncope, lower systolic blood pressure, increased respiratory rate, hypoxia, hypocarbia, acidosis, echocardiographic McConnell sign, inotropic infusion, elevated heart rate, elevated Troponin-I and brain natriuretic peptide levels. In multivariate analysis, McConnell sign (p=0.026), inotropic infusion (p=0.007) and acidosis (p<0.0001) were only independent predictors of in-hospital mortality. In univariate analysis, patients with total mortality tended to have older age, cyanosis, syncope, history of cancer, lower systolic blood pressure, shock, inotropic infusion, hypoxia, hypocarbia, acidosis and increased brain natriuretic peptide levels. In multivariate analysis, older age (p=0.031) and history of cancer (p=0.018) are only independent predictors of total mortality.

**Conclusion:** Risk stratification is important in management of APE. Predictors of in-hospital mortality and total mortality were different in our study. While age and history of cancer were independent predictors of total mortality; acidosis, McConnell sign and need for inotropic infusion were independent predictors of in-hospital mortality. These predictors could be included in the risk stratification in daily clinical practice.