The role of thrombolytic therapy in the treatment of acute sub massive pulmonary embolism: A single center observational study from India.

**Purpose:** Routine use of thrombolytic therapy in hemodynamically stable patients with submassive pulmonary embolism is controversial. The aim of the study was to observe the safety & efficacy of thrombolytic therapy in acute pulmonary embolism patients with normal blood pressure and right ventricular dysfunction. **Methods:** In this study, 130 patients with submassive pulmonary embolism who had right ventricular (RV) dysfunction, were included and treated with thrombolytic therapy. **Result:** Mean age of our study patients was 43 +/- 14.9 years. Fifty-three (41%) patients in our study were within forty years of age. Hundred–eight (83%) patients had clinical improvement in NYHA class and it was statistically significant (p<0.001). Both RV dysfunction and pulmonary artery systolic pressure (PASP) improved significantly following thrombolytic therapy from baseline (mean PASP 49 mm of Hg vs 28 mm of Hg; p= 0.01; 95% CI = -13 to –56). Twelve (9%) patients died and two patients (1.5%) developed intra cerebral haemorrhage. **Conclusion:** Thrombolytic therapy is helpful in improving clinical course following sub-massive acute pulmonary embolism.

**Key-words:** Fibrinolytic therapy; pulmonary embolism; sub-massive.