Long Term Mortality of Acute Ischemic Stroke after Thrombolytic in Thai Patients

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**Background:** Acute ischemic stroke is the most common neurological disease and the third leading cause of death in Thailand —Little is known on long-term follow-up after thrombolysis in ischemic stroke patients because the majority of studies have evaluated outcome at 3-18 months.

**Objective:** We aimed to assess long term mortality after intravenous thrombolysis. Primary objective: Mortality rate in acute ischemic stroke after thrombolytic therapy and follow up 1 year. Secondary objective: Factors affecting the mortality in acute ischemic stroke after thrombolytic therapy.

**Methods:** A retrospective cohort study registry of all consecutive ischemic stroke patients was submitted to intravenous thrombolytic therapy in Thais by national data between October 2004 and September 2014 and followed until September 2015. The mortality, associated risk factors, and causes of death were measured.

**Results:** The sample size was 6833 patients at 1-week survival rate 89% < 95% CI 0.8813 - 0.8962>, 1-month survival rate 84% < 95% CI 0.8801 - 0.8475>, 3-month survival rate 79% < 95% CI 0.7811 - 0.8004>, 6-month survival rate 75% < 95% CI 0.7427 - 0.7630>, 1-year survival rate 73% < 95% CI 0.7163 - 0.7374>, 3-year survival rate 63% < 95% CI 0.6190 - 0.6434>, and 5-year survival rate 54% < 95% CI 0.5243 - 0.5578>. Causes of death in admission were ischemic stroke, post thrombolytic therapy bleeding, heart disease, and causes of death after discharge included heart disease, infection, and old age.

**Conclusion:** Standard-dose intravenous rtPA in a retrospective of Thai patients shows mortality rate of 46% at 5 years. Cause of death in admission is associated with ischemic stroke. Cause of death after discharge is related to heart disease.

**Keywords:** Long term mortality, Ischemic stroke, Thrombolytic