

## ABSTRACT

**Title** : Clinical Characteristics of Stroke Patients in the Northern Thailand

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**Background:** Acute stroke required emergency management.

**Objective:** This study aimed to analyze the clinical characteristics and management of stroke in the Northern Thailand.

**Material and Methods:** We interviewed patient/ relative and analyzed the data of the acute stroke patients admitted to twelve government hospitals in the Northern Thailand during October 2010 to September 2012.

**Results:** Total of 802 acute stroke patients were recruited, mean ages was  $65 \pm 13.5$  years old, 54.1% were male. Most patients had regularly exercise and rarely consumed alcohol. Co-morbidities such as hypertension, diabetes, dyslipidemia were 57.2%, 15.6%, 18.4% respectively. Ischemic and hemorrhagic stroke were 79.7% and 20.3%, respectively. Clinical characteristics of the patients including BP, pulse, GCS, NIHSS, and blood tests were not different between ischemic and hemorrhagic stroke. Patients were admitted to general ward 73% and only 13.1% were admitted to stroke unit. Thrombolytic agent was given in 10.4% of the ischemic stroke patient. The reasons that this agent was not used were unavailable in the hospital 24.5%, and 75.5% had contraindications including delayed onset (37.9%). Bleeding complication from thrombolytic agent was 15.4%. Antithrombotic agents for secondary stroke prevention were subsequently used in 94.7% of ischemic stroke patients.

**Conclusions:** Hypertension was the most important risk factor in the Northern of Thailand. Majority type was ischemic stroke. Due to resource limitation, most of the patients were admitted to general ward. Thrombolytic therapy was given in minority of ischemic stroke patients, reasons apart from contraindication were unavailable and delayed onset. Improvement system of care is needed.

**Key words** Clinical Characteristics Stroke patients Northern Thailand