

The incidence and associated risk factors of early poststroke seizures and poststroke epilepsy.

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Abstract

Objectives – To study the incidence of early poststroke seizure and poststroke epilepsy among Thai people and the differences in early poststroke seizures and poststroke epilepsy-associated risk factors.

Material and Methods – This study conducted by studying patients who have poststroke seizures in Vajira Hospital, from 2014 to 2018. The patients were divided into two groups, including early poststroke seizures group and poststroke epilepsy group with a minimum follow-up of 6 months.

Results – Three thousand six hundred patients with no history of epilepsy presented with the first stroke. 93 patients had developed seizures. Mostly, 54 patients (58.1%) were in a group of hemorrhagic stroke. For ischemic stroke patients, 39 patients (41.9%) had seizures occurred. There were 59 patients with an early poststroke seizure group, of which 44 of them (74.6%) were hemorrhagic stroke patients, and 15 of them (25.4%) were ischemic stroke patients. For poststroke epilepsy group, 34 patients were found in which 24 patients among them (70.6%) were ischemic stroke patients, and 10 of them (29.4%) were hemorrhagic stroke patients. From a comparison between two groups of early poststroke seizures, there was a relation with hemorrhagic stroke and younger age. For the poststroke epilepsy group, there was a relation with ischemic stroke subtype, older age, atrial fibrillation, abnormal kidney function, and high serum calcium.

Conclusion – The incidence of poststroke seizures was found to occur in 5.17 patients / 1,000 people population/year. Ischemic stroke, older age, atrial fibrillation, kidney function, and serum calcium are independent predictors for poststroke epilepsy.