

Thrombolysis in Acute Ischemic Stroke: A Study from National Institute of Neurological and Allied Sciences (NINAS), Kathmandu, Nepal.

ABSTRACT

Background: Stroke is the major cause of morbidity and mortality worldwide. The number of stroke patients receiving thrombolysis in the developing world is extremely low.

Methods: In this retrospective study (June 2012-November 2017), acute ischemic stroke patients who were thrombolysed and record found were included. Their demographic profiles, clinical profiles, risk factors, type of thrombolytic used and outcomes were systematically recorded and analysed.

Results: A total of 26 patients were thrombolysed. The mean age was 59.4 years (Age range: 23-86 years). Sixteen were males. One patient received alteplase and rest of the patients received Tenecteplase (TNK). The mean time from the onset of stroke symptoms to first dose of thrombolytic [onset to treatment (OTT)] was 3.54 hours. Fifteen patients had good neurological outcome as measured by mRS. The median modified Rankin Scale (mRS) at discharge was 2. Thrombolysis related post-treatment complication was noted in 4 (0.15%), out of which non-fatal intracranial bleed occurred only in 2 patients. None of the patients receiving IV Tenecteplase (TNK) had thrombolysis related complications and none of the patients had fatal intracranial bleed. One patient receiving TNK died 19 days after admission.

Conclusion: This study demonstrates the effective thrombolysis in the treatment of acute ischemic stroke in Nepal.

Key words: ischemic stroke, thrombolysis, tissue plasminogen activator, tenecteplase Nepal