

A Prospective Study of Thrombolysis in Ischemic Stroke, from Defecit to Daily Living

**Dr. S. Sivaramasubramanian, Dr. M. R. Manivannan, Dr. D. Ganesa Pandian,
Dr. J. Muthukumar, Dr. Subramanian**

¹P. G in Neuromedicine, Madurai Medical College, Madurai

²Professor, Madurai Medical College, Madurai
(Contributing Authors)

1. Back ground and Purpose

I. V. Thrombolysis of acute ischemic stroke (AIS) by tissue Plasminogen Activator (t - PA – Alteplase) is a well - established rescue treatment for patients presenting within the window period of 3hrs (now extended to 4.5hrs) since 1996, when it was approved by FDA. Our government started a pilot project by making it available free of cost in government hospitals. In our Department of Neurology, Govt. Rajaji Hospital we have started I. V thrombolysis since 2016, and we have done a pilot prospective study regarding the outcome of I. V thrombolysis using t - PA in AIS patients presenting within window period. . The aim is to study the outcome during the post thrombolysis period (Immediately after thrombolysis, then after 24hrs and after 3 months post thrombolysis).

2. Methods and Materials

Is a prospective study of 24 patients, since 2016 - 2018, who were presented within the window period of 3 - 4.5hrs post stroke, to the Triage ward i. e., Causality of Govt. Rajaji Hospital. We use to assess them at the door (at causality), we transfer them to our Neurology ward (Stroke ICU) and thrombolysed them. We carefully selected the patients with stringent inclusion and exclusion criteria in par with international standards. After initial NIHSS (the basal level) a CT Brain done to exclude. then we used to proceed with other “ **patient selection**” protocols. Our aim is to nullify mortality, to avoid complications in consequence of thrombolysis, (like major bleeds). Those with massive (more than 1/3 of) cortical infarct are also excluded in view of significant major hemorrhagic transformations. . A proforma filled up for each patients and explained consent obtained before thrombolysis. Our patients were under the age of 18 to 65 years. They were I. V thrombolysed with, 0.9mg/kg of t - PA.

3. Results

- 24 patients' undergone thrombolysis.
- 20 Males and 4 Females.
- Those with NIHSS < 16 showed very good response, in the immediate post thrombolysis period and in 3 months follow up (all were rehabilitated presented with a modified RANKINS SCORE of 0 - 2, in three months follow up visit),

- two patients showed minor bleeding (ICH), but recovered well (8.3%)
- hypersensitivity of moderate severity in one patient for t - PA, managed and then completed infusion. (4.1%)

The recovery of power in lower limbs was excellent compare to upper limbs. We got patients of lower limb power 0/5 to 3/5, (prior to IV Thrombolysis) and all of those walked home independently (without support) on discharge.

One male, aged 65 years, whose EKG was normal and he was not a known CAD pt., developed extensive AWMi with acute LVE. died post thrombolysis, No ICH found in the follow up Neuroimaging of the, after 24 hrs. post thrombolysis. So, the mortality in this in this regard is of 4.1%.

4. Conclusion

The outcome is excellent and nobody died of major IC H, due to thrombolysis, And thus, now a days our state run hospitals, makes the deficit (if otherwise), sustainable by the common poor bread winner of the family to resume a worthy daily living, by resuming his/her occupation. .