

# OUTCOME OF ACUTE ISCHEMIC STROKE PATIENTS TREATED WITH INTRAVENOUS RECOMBINANT TISSUE PLASMINOGEN ACTIVATOR IN COASTAL ANDHRA PRADESH, INDIA

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## BACKGROUND AND AIMS

Thrombolysis with intravenous (IV) tissue plasminogen activator (rtPA) decreases disability in acute ischemic stroke (AIS) when given within 4.5 hours. This study analysed outcomes of thrombolysed patients with rtPA (Actilyse) in coastal Andhra Pradesh, India where data is sparse.

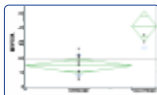
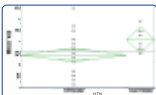
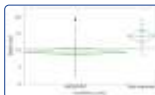
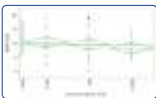
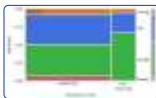
## METHOD

- Retrospective Hospital Based Observational Study: Consecutive Thrombolysed Patients of AIS Over 4 Years.
- Statistical analysis system (SAS) was used to analyse data on demography, assessment NIHSS score, comorbidities, onset to needle time (ONT) and outcome at 1, 3 and 6 months.
- Outcome was stratified as good (mRS 0-2) and bad (mRS 3-6).

## RESULTS

- 81 patients - 59 males and 22 females (Mean ages 58 & 67 years). Sixty three patients improved (79%).
- NIHSS score correlated well with outcome (95% CI 0.9999,  $p=0.0001$ ).
- No univariate correlation existed with Age, Sex, Ischemic Heart Disease, Stroke, Hypertension, Diabetes Mellitus (DM), Atrial Fibrillation, Smoking, Alcohol, Hyperlipidemia and ONT.
- Multivariate correlation of age and NIHSS score showed significance in the middle aged (CI 0.9987,  $p=0.0026$ ) as was ONT with NIHSS in the 3 to 4.5 hours group (CI 1.000,  $p < 0.0001$ ) and hypertension with NIHSS (CI 0.9966,  $p=0.0069$ ).
- Hypertension alone had better outcome than with stroke and DM (CI 0.998,  $p=0.0004$ ).
- ASPECTS & MRI Volume correlated positively with outcome ( $p=0.0114$ ) (CI 0.998,  $p=0.0004$ ).

Total Patients: 81  
Improved: 63  
Males - 45  
Females - 18  
Not Improved: 18  
Males - 14  
Females - 4



## CONCLUSION

- AIS patients improve with thrombolysis at all ages especially middle age.
- NIHSS score with/without hypertension or ONT correlate with outcome.
- Hypertension alone had better outcome than with stroke and DM.
- ASPECTS and MRI volume correlate with outcome.