

Massachusetts Neurologic Association

March 25, 2017

CALL FOR ABSTRACTS

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The Poster Presentation Session at the MNA Spring Meeting aspires to allow residents and fellows in training to present their research or interesting cases in a poster session. Please follow the following abstract guidelines:

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Title: Retrospective Analysis of Intravenous tissue plasminogen activator (IV-tPA) for Acute Ischemic Stroke (AIS) in HIV-infected adults

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Abstract:

Background: Though primary HIV infection has been shown to increase both ischemic and hemorrhagic stroke risk, there are limited data on the safety and outcome of intravenous (IV) thrombolysis with tissue plasminogen activator (tPA) for acute ischemic stroke (AIS) in HIV-infected patients.

Methods: A retrospective case review was performed of IV tPA-treated HIV patients who presented with acute stroke symptoms in three large U.S. teaching hospitals collectively from January 2000 to February 2013. Data collected included demographic information; duration of HIV infection; National Institute of Health stroke scale (NIHSS) score on hospital admission; ischemic stroke risk factors including hypertension, dyslipidemia, cigarette smoking; and neuroimaging findings. Our main outcomes of interest were (a) rate of hemorrhagic transformation after IV-tPA; and (b) disability or death as measured by the modified Rankin Scale (mRS) score on follow-up.

Results: We identified 20 HIV-infected patients treated with IV-tPA, 7 of whom were stroke mimics. The mean age was 52.4 years (range 16-83), 13/20 were male, 12/20 patients had an undetectable viral load at time of stroke and 11/20 had CD4 counts $<400/\text{mm}^3$. The mean duration since diagnosis of HIV was 16 years (range 3-28), mean NIHSS score at presentation 9.5 (range 2-23), and mean stroke symptom onset-to-needle time was 140 minutes (range 50-260). Of the 20 patients, 2 cases had nonfatal intracranial hemorrhage after IV tPA. The mean mRS score was 1.8 as measured at a mean of 64 days after stroke onset.

Conclusion:

We provide initial data on the detailed short term outcomes of people living with HIV who receive tPA for acute ischemic stroke in the U.S.A. Access to outcomes data may improve decision making around tPA use and influence the development of a shared registry in future years.