

Exclusion Criteria for Intravenous Thrombolysis in Stroke Mimics: An Observational Study.

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Abstract

BACKGROUND:

Stroke mimics (SMs) are frequent in emergency departments (EDs), but are treated infrequently with intravenous recombinant tissue plasminogen activator (rt-PA) thrombolysis. We aimed at identifying the factors that lead to the exclusion of SMs from thrombolytic therapy.

METHODS:

Consecutive patients presenting to the ED between December 2004 and March 2011 with symptoms that suggested acute ischemic stroke were included.

RESULTS:

Eight hundred forty-two patients were included in this study; 113 (13.4%) were considered SMs; these patients were younger ($P = .01$), more frequently diabetic ($P = .001$), arrived later to the ED ($P = .03$), had lower National Institutes of Health Stroke Scale scores ($P < .001$), and higher frequencies of negative diffusion-weighted imaging studies ($P = .002$). The most common causes of cases of SM were toxic metabolic disorders ($n = 34$ [30.1%]) and seizures ($n = 22$ [19.5%]). The most frequent cause of consultation was aphasia ($n = 43$ [37.6%]). SM patients had a total of 152 contraindications for rt-PA, with 34 (30%) patients having >1 contraindication. The most frequent of these were being beyond the therapeutic window for thrombolysis ($n = 96$) and having deficits not measurable by the National Institutes of Health Stroke Scale or very mild symptoms before the start of rt-PA ($n = 37$). Twenty-four (21.2%) patients had both contraindications simultaneously. Two patients (1.76%) in the SM group were candidates for rt-PA but did not receive this treatment because they or their family rejected it. Of 729 stroke patients, 87 (11.9%) did receive rt-PA.

CONCLUSIONS:

SM patients frequently had exclusion criteria for systemic thrombolysis, the most frequent being presenting beyond the established thrombolytic window.