

THESES

INTRAVENOUS THROMBOLYTIC THERAPY FOR ACUTE ISCHEMIC STROKE: CLINICAL EXPERIENCE OF DEPARTMENT OF NEUROLOGY OF THE HOSPITAL DAS CLÍNICAS DA UNIVERSIDADE DE SÃO PAULO (ABSTRACT)*. **THESIS. SÃO PAULO, 2007.**

*ELI FARIA EVARISTO***

Intravenous use of tissue plasminogen activator for acute ischemic stroke therapy has been approved for some years and guidelines and recommendations about its use have been published. Hospital evaluation needs to be organized in order for this treatment to become feasible and safe, reaching the expected results.

The objective of this study was verify feasibility and safety of intravenous thrombolytic therapy in patients treated at Department of Neurology of the Hospital das Clínicas da Faculdade de Medicina da Universidade de São Paulo, evaluate those patients' characteristics and clinical outcome as well verifying complications of therapy and outcome predictors. Also in-hospital service was evaluated through time analysis of several stages of this service in four different patient groups based on the place of the first medical evaluation.

Fifty one patients were treated between June 1998 and August 2005. They were primarily assisted at Neurological Emergency Department (22 patients), Heart Institute (22 patients), clinical wards of Central Institute of Hospital das Clínicas da Faculdade de Medicina da Universidade de São Paulo (3 patients) and University Hospital (4 patients). Times of in-hospital evaluation, represented by their respective median ones, were: between ictus and hospital admission (55 minutes); between admission and computerized cranial tomography analysis (35 minutes); between admission and the beginning of the thrombolytic therapy (90 minutes) and between

ictus and the beginning of the thrombolytic therapy (160 minutes).

In a general way, in-hospital service got better during the period of the study. However, comparative analysis of the groups disclosed that times between admission and analysis of the computerized cranial tomography and between admission and the beginning of the thrombolytic therapy were longer at Heart Institute ($p=0.002$ and $p=0.01$; respectively) than at Neurological Emergency Department and University Hospital. The main mechanism of acute ischemic stroke was cardiac emboli (54%). Most of treated patients arrived at hospital with serious neurological deficits (median 17 in the NIH Stroke Scale). Excellent functional outcome in 3 months, defined as scoring 0 or 1 by modified Rankin Scale was observed in 29% of the cases and symptomatic cerebral hemorrhage in 6% of the cases.

In conclusion, intravenous thrombolytic therapy with tissue plasminogen activator at Hospital das Clínicas da Faculdade de Medicina da Universidade de São Paulo was feasible and safe. The intensity of the neurological deficit at admission, as measured by NIH Stroke Scale, and four-point or more score reduction on this scale after 24 hours were independent outcome predictors.

KEY WORDS: thrombolytic therapy, cerebrovascular accident/therapy, emergency medical services, fibrinolytic agents/therapeutic use, university hospitals/standards.

* Tratamento trombolítico intravenoso no acidente vascular cerebral isquêmico: experiência da clínica neurológica do Hospital das Clínicas da Faculdade de Medicina da Universidade de São Paulo (Resumo). Tese de Doutorado, Faculdade de Medicina da Universidade de São Paulo (Área: Neurologia). Orientador: Milberto Scaff.

** Address: Praça Amadeu Amaral 27 / 7º andar, 01327-010 São Paulo SP, Brasil. E-mail: evaristo@usp.br