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Título	Impact of thrombolysis and risk factors for post-stroke seizures or epilepsy
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Introduction: Stroke is a cause of seizures and secondary epilepsy in adults and post-stroke seizures are observed in 2% to 20% of patients. Among risk factors for post-stroke seizures or epilepsy are cortical involvement, bleeding, severity and extension of the ischemic injury. Thrombolytic therapy has been changing the outcome of ischemic stroke and might change the incidence or characteristics of seizures or epilepsy associated with stroke as well. Some evidences suggest that thrombolysis for acute stroke might increase post-stroke seizures, but the impact of thrombolysis in post-stroke seizures or epilepsy remains largely unknown.

Objectives: Investigate the incidence and risk factors for seizures or epilepsy after ischemic stroke in patients submitted or not to thrombolytic therapy.

Methods: Case-control study of 153 patients submitted to thrombolysis for treatment of acute stroke and 102 matched controls with acute stroke not submitted to thrombolysis.

Results: In our study, we observed post-stroke seizures or epilepsy in 14.4% of patients submitted to thrombolytic therapy and in 14.7% of control patients. No associations were observed regarding smoking, alcohol abuse, hypertension, ASPECTS score, presence of early detectable signs of stroke in CT-scan, diabetes mellitus, hyperlipidemia, obesity, age, blood pressure levels, and glucose levels at admission. However, we observed an association between seizures and involvement of cerebral cortex during stroke (O.R.=11.4; 95% C.I.=1.53-85.8; p=0.002). Also, we observed that the risk for seizures increases according with NIH scores at admission (O.R.=1.1; p=0.02; 95% C.I.=1.03-1.16, per point) and in those patients with Rankin 2-5 scores after three months, when compared with patients classified as Rankin 0-1 (O.R.=5.2; 95% C.I. = 2.4-11.5; p<0.0001).

Conclusions: Post-stroke seizures or epilepsy were observed in 14.4% of our patients submitted to thrombolytic therapy and in 14.7% of controls. Cortical involvement and severity of stroke, as evaluated by NHI scores at admission, and Rankin scores three months later, were risk factors for post-stroke seizures or epilepsy after stroke in patients submitted or not to thrombolytic therapy. We conclude that thrombolytic therapy for acute stroke does not add further burden to post-stroke seizures or epilepsy.