

SEIZURES AND EPILEPSY AFTER THROMBOLYTIC THERAPY FOR ISCHEMIC STROKE

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Background and aims: Stroke is the leading cause of secondary epilepsy in adult patients. Post-stroke seizures are observed in 2% to 20% of patients. Among risk factors for post-stroke seizures are cortical involvement, bleeding, severity and extension of the ischemic injury. Thrombolytic therapy has been changing the history of ischemic stroke and it might change the incidence or characteristics of seizures or epilepsy associated with stroke as well. Thus, we investigate the incidence and associated factors for seizures and epilepsy after ischemic stroke in patients submitted to thrombolytic therapy. Methods: Retrospective analysis of the occurrence and risk factors for post-stroke seizures or epilepsy in 152 patients submitted to thrombolysis from 2002 to 2009 in Porto Alegre. Data were analyzed using SPSS version 17. Results: In our study, we observed post-stroke seizures or epilepsy in 14.5% of patients submitted to thrombolytic therapy. Also, we observed a positive association between seizures and cortical involvement (RR: 1,27 IC 95%:1,14-1,35; $p=0.026$) and the presence of diabetes mellitus (OR: 3,33 IC95%:1,3-8,56; $p=0.014$). No associations were observed regarding smoking, alcoholism, hypertension, ASPECTS score, presence of early detectable signs of stroke in CT-scan, bleeding, hyperlipidemia or obesity. Excluding patients with Rankin 6, we observed higher occurrence of seizures in patients classified in Rankin 2-5 when compared with patients classified in Rankin 0-1 (OR 5,84 IC95%:2,16-15,76; $p < 0.001$). Conclusions: Post-stroke seizures or epilepsy was observed in 14.5% of our patients submitted to thrombolytic therapy. Cortical involvement, higher Rankin scores and diabetes mellitus were risk factors for post-stroke epilepsy after stroke thrombolytic therapy.