Is alteplase still important in M1 occlusions undergoing thrombectomy?

Manuel Machado¹, Alberto Fior¹, Isabel Fragata², João Reis², and Ana Paiva Nunes¹

From the Lisbon Stroke Summit, Lisbon, Portugal. 5–6 April 2019.

Abstract

Introduction: Several randomized-controlled studies have shown the benefit of mechanical thrombectomy (MT) following intravenous thrombolysis (IVT). But nowadays, the utility of IVT before MT is being questioned. Two randomized-controlled studies are ongoing to address this question. Data available is conflicting. Some studies found no differences in functional outcomes while others found better outcomes, lower mortality, higher rates of successful recanalization in patients submitted to MT following IVT when compared with patients submitted to direct MT.

Objectives: We aimed to compare patients with acute middle cerebral artery (M1) - occlusion treated with MT alone or with preceding IVT in a comprehensive stroke center in Portugal.

Methods: Retrospective analysis of all registered M1 occlusions in our prospective database from January 2016 until June 2018.

Results: During this period, 669 thrombectomies were performed, and 263 were M1 occlusions. 157 patients were submitted to IVT followed by MT and 106 to MT alone (due to contraindications to perform IVT). Age, gender and baseline NIHSS were similar between the two groups. No significant differences were found in successful recanalization rates (Thrombolysis in Cerebral Infarction (TICI) 2b/3, 91.1% vs 93.3%, p=0.529), symptomatic haemorrhagic rates (3.2% vs 5.7%, p=0.333), and long-term favourable outcome (modified Rankin Scale 0–2, 41.2% vs 44.7%, p=0.580) between patients receiving MT plus IVT and those receiving MT alone.

Conclusions: In our cohort, patients with M1 occlusions treated with IVT + MT have similar outcomes and complication rates when compared to MT-only treated patients.

¹Unidade Cerebrovasculares, Centro Hospitalar Universitário Lisboa Central
²Serviço de Neuroradiologia, Centro Hospitalar Universitário Lisboa Central

Citation: Machado et al. Is alteplase still important in M1 occlusions undergoing thrombectomy? International Journal of Clinical Neurosciences and Mental Health 2019; 6(Suppl. 1):P12

Published: 04 April 2019

Open Access Publication Available at http://ijcnmh.arc-publishing.org

© 2019 Machado et al. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.