Multimodal approach in current acute stroke therapy

Ricardo Varela¹, Daniela Vieira¹, Cristina Machado¹, César Nunes², Ricardo Veiga², Egídio Machado², Fernando Silva¹, João Sargento-Freitas¹, and Gustavo Santo¹

From the Lisbon Stroke Summit, Lisbon, Portugal 6–7 April 2018.

Abstract

**Background:** Interhospital transfer after use of intravenous tissue-type plasminogen activator (tPA) in acute stroke is increasingly frequent. Intra-arterial stroke therapy is progressively challenging demanding an intricately medical and interventional articulation.

**Clinical Case:** Male patient, 61 yo, mRS 0, with previous history of active smoking, unmedicated hypertension and chronic alcoholism, admitted in a secondary center ER department with a left TACS within 30 min of evolution and scoring 22 in the NIHSS. Workup with head CT and angiogram revealed an ASPECTS of 10 and an occlusion in the M1 segment of the left middle cerebral artery. After interhospital stroke protocol activation, the patient initiated tPA (50 min) and was emergently transferred to our center entering the angio-suite after 130 min. Angiography revealed a left internal carotid subocclusive stenosis in addition to the previously identified M1 occlusion. After passing the stenosis, a TICI2b score was achieved using an aspiration device. In the face of early filling delay, it was decided for balloon carotid angioplasty which was successful despite secondary distal embolization determining another aspiration procedure resulting in a final TICI2b score. The patient was submitted to delayed internal carotid stenting after effective antiaggregation at the 10th day, with a final 40% stenosis. No clinical or imagological complications followed the procedures and the patient improved during admission, being discharged after 2 weeks with a NIHSS of 6 and a mRS of 3.

**Conclusions:** Current acute stroke therapy is quite challenging and demands an effective and organized articulation between the different centers and professionals. The controversy regarding the best clinical approach to tandem pathology is also addressed, further emphasizing the clinical differentiation need in the field.

¹Neurology Department, University and Hospital Center of Coimbra, Coimbra, Portugal
²Neuroradiology Department, University and Hospital Center of Coimbra, Coimbra, Portugal

Email address: ricardoathayde@gmail.com

Citation: Varela et al. Multimodal approach in current acute stroke therapy. International Journal of Clinical Neurosciences and Mental Health 2018; 5(Suppl. 1):O5

Published: 06 April 2018